Index Of Sheets
SEE SHEET IA

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

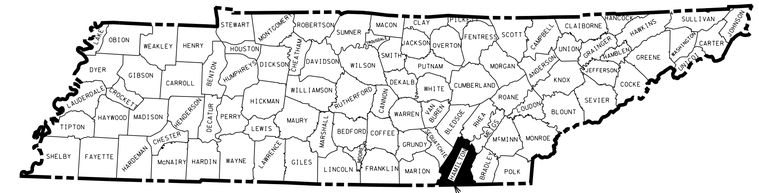
TENN.	YEAR	SHEET NO.
	2015	1
FED. AID PROJ. NO.	PHSIP-3602(5)	
STATE PROJ. NO.	33960-3515-94	

HAMILTON COUNTY

SR-153 & LOCAL ROUTE 03602 (SHEPHERD RD. INTERCHANGE)
FROM W. SHEPHERD RD. TO SHAW AVE.

CONSTRUCTION

STATE HIGHWAY NO. 153 F.A.H.S. NO. N/A



BEGIN PROJ. NO. 33960-2515-94
(R.O.W.)
P.L. ℄ LOCAL ROUTE 03602 STA. 115+00.00
N:259382.7972
E:2212679.9599

END PROJ. NO. 33960-2515-94
(R.O.W.)
P.L. ℄ LOCAL ROUTE 03602 STA. 116+19.79
N:259501.6028
E:2212669.0644

N

SCALE: 1"= 2,000'

END PROJ. NO. PHSIP-3602(5);
33960-3515-94 (CONST.)
STA. 116+09.57 LOCAL ROUTE 03602
N:259491.4845
E:2212670.5024

BEGIN PROJ. NO. PHSIP-3602(5);
33960-3515-94 (CONST.)
STA. 100+00.00 LOCAL ROUTE 03602
N:258612.9986
E:2211477.5203

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SEALED BY

NO EXCLUSIONS
NO EQUATIONS

APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT CE MANAGER 1 ROBERT RODGERS, P.E.
DESIGNED BY SAIN ASSOCIATES
DESIGNER MARK RANDALL, E.I. & BRANDON DENNY CHECKED BY RICHARD R. HOLT, P.E. & SCOTT COTHRON, P.E.
P.E. NO. 33960-1515-94
PIN NO. 118769.00

ROADWAY LENGTH	0.268 MILES
BRIDGE LENGTH	0.037 MILES
BOX BRIDGE LENGTH	0.000 MILES
PROJECT LENGTH	0.305 MILES

TRAFFIC DATA	
ADT (2015)	8,120
ADT (2025)	8,540
DHV (2025)	965
D	55 - 45
T (ADT)	4 %
T (DHV)	3 %
V	45 MPH

SURVEY DATE: 03/17/14

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	PHSIP-3602(5)	1A

INDEX

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GENERAL NOTES AND SPECIAL NOTES	2J – 2M
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STORM WATER POLLUTION PREVENTION PLAN (SWPPP) INDEX	S-1

STANDARD BRIDGE DRAWINGS

DWG. NO.	REV.	DESCRIPTION
STD-1-1SS	05-01-14	BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET
STD-1-6	04-28-97	BRIDGE END DRAIN W/ PABE
STD-1-7	07-31-00	BRIDGE END DRAIN W/ PABE
STD-1-8	05-01-95	BRIDGE END DRAIN 2'x8'-7" W/ PABE
STD-1-9	05-01-95	BRIDGE END DRAIN 4'x8'-7" W/ PABE
STD-2-1	11-01-10	BRIDGE MOUNTED INTERCONNECTED PORTABLE BARRIER RAIL
STD-8-2SS		SINGLE SLOPE PARAPET STANDARD LIGHT SUPPORT DETAILS
STD-11-1	05-01-14	BRIDGE RAILING W/ STRUCTURAL TUBING

STANDARD ROADWAY DRAWINGS

ROADWAY DESIGN STANDARDS

DWG. NO	REV.	DESCRIPTION
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-2	09-05-01	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-3	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-5	05-01-08	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	03-30-10	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	05-24-12	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-UD-3	09-05-96	UNDERDRAIN DETAILS
RD-UD-4	05-27-01	UNDERDRAIN LATERAL DETAILS
RD-UD-6	12-18-94	LATERAL UNDERDRAIN ENDWALL DETAIL FOR 1:1 & 2:1 SLOPES
RD-UD-7	12-18-94	LATERAL UNDERDRAIN ENDWALL DETAIL FOR 3:1 & 4:1 SLOPES
RD-UD-9	12-18-94	LATERAL UNDERDRAIN ENDWALL DETAIL FOR 6:1 SLOPES
RD01-S-11	04-04-03	DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD01-S-11A	10-15-02	ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION
RD01-SA-1	10-15-02	SAFETY APPROACH TO UNDERPASSES GRADING DESIGN & SLOPE PROTECTION
RD01-SD-1		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES
RD01-SD-3		INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS
RD01-SD-4		INTERSECTION SIGHT DISTANCE 5-LANE AND 4-LANE UNDIVIDED ROADWAYS
RD01-SE-2	10-15-02	URBAN SUPERELEVATION DETAILS
RD01-TS-1	10-15-02	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS
RD01-TS-2B	10-15-02	DESIGN STANDARDS 4 AND 6 LANE COLLECTOR HIGHWAYS WITH FLUSH MEDIANS
RD01-TS-4	07-23-13	DESIGN STANDARDS 1 AND 2 LANE RAMPS
RD01-TS-6	07-31-13	TYPICAL CURB AND GUTTER SECTIONS WITH SHOULDER
RD01-TS-6A	07-31-13	TYPICAL CURB AND GUTTER SECTIONS WITHOUT SHOULDER

DRAINAGE - CULVERTS AND ENDWALL

DWG. NO	REV.	DESCRIPTION
D-FLU-1		FLUME DETAILS
D-PB-1	01-02-13	STANDARD DETAILS CLASS "B" BEDDING AND CULVERT EXCAVATION
D-PE-3B(1)	07-17-07	CONCRETE ENDWALL TYPE "U" WITH STEEL PIPES GRATE (FOR 18" THRU 48" PIPES) (3:1 SLOPE)
D-PE-3B(2)	05-27-01	CONCRETE ENDWALL TYPE "U" WITH STEEL PIPE GRATE FOR 18" THRU 48" PIPES 3:1 SLOPE
D-PE-5	05-27-01	STANDARD WINGWALLS HORIZONTAL OVAL CONCRETE PIPES
D-PE-7A	05-27-01	STANDARD WINGWALLS FLATBASE CONCRETE PIPES
D-PE-9	04-25-90	CONCRETE ENDWALLS TYPE "B" (FOR ROUND & SIDE TAPERED INLETS, PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 AND 4:1 SLOPES)
D-PE-9A	10-25-82	GENERAL DIMENSION QUANTITIES ROUND PIPE CONCRETE ENDWALLS TYPE "B" (PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 AND 4:1 SLOPES)
D-PE-18A	06-14-13	18" CONCRRETE ENDWALL CROSS DRAIN
D-PE-18B		18" CONCRRETE ENDWALL CROSS DRAIN
D-PE-24A	06-14-13	24" CONCRRETE ENDWALL CROSS DRAIN
D-PE-24B		24" CONCRRETE ENDWALL CROSS DRAIN
D-PE-36A	06-14-13	36" CONCRRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE
D-PE-36B		36" CONCRRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE
D-PO-1	05-27-01	STANDARD OVAL & FLAT BASE CONCRETE CULVERT PIPE

DRAINAGE-CATCH BASINS AND MANHOLES

DWG. NO	REV.	DESCRIPTION
D-CB-12B	03-11-14	STANDARD RECTANGULAR BRICK NO. 12 CATCH BASIN
D-CB-12LP	08-01-12	LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 12LP CATCH BASIN
D-CB-12P	03-11-14	STANDARD PRECAST RECTANGULAR CONCRETE NO. 12 CATCH BASIN
D-CB-12S	03-11-14	STANDARD RECTANGULAR CONCRETE NO. 12 CATCH BASIN
D-CB-14B	03-11-14	STANDARD RECTANGULAR BRICK NO. 14 CATCH BASIN
D-CB-14P	03-11-14	STANDARD PRECAST RECTANGULAR CONCRETE NO. 14 CATCH BASIN
D-CB-14S	03-11-14	STANDARD RECTANGULAR CONCRETE NO. 14 CATCH BASIN
D-JBS-1	08-01-12	STANDARD 32" X 32" SQUARE CONCRETE NO. 1 JUNCTION BOX

ROADWAY AND PAVEMENT APPURTENANCES

DWG. NO	REV.	DESCRIPTION
RP-D-16	07-15-08	DETAILS OF LOWERED STANDARD CONCRETE DRIVEWAYS
RP-H-3	06-04-13	HANDICAP RAMP AND TRUNCATED DOME SURFACE DETAIL
RP-H-5	06-04-13	PARALLEL CURB RAMP
RP-H-9	06-04-13	PARALLEL CURB RAMP TYPE 3 AND 4
RP-J-1	10-26-00	PORTLAND CEMENT CONCRETE PAVEMENT JOINT TYPES AND SPACING
RP-NMC-10	07-29-03	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-NMC-11	02-28-02	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-R-1	05-27-01	STANDARD RAMPS TO SIDE ROADS
RP-S-7	06-04-13	DETAILS FOR STANDARD CONCRETE SIDEWALKS

SAFETY APPURTENANCES AND FENCE

DWG. NO	REV.	DESCRIPTION
S-F-1	05-24-12	HIGH VISIBILITY FENCE
S-F-10B	05-14-10	STANDARD RIGHT-OF-WAY CHAIN LINK FENCE
S-CZ-1		CLEAR ZONE CRITERIA
S-PL-1		SAFETY PLAN AT ROADSIDE HAZARDS

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INDEX AND STANDARD DRAWINGS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	PHSIP-3602(5)	1B

S-PL-3		SAFETY PLAN: MINIMUM INSTALLATION AT BRIDGE ENDS
S-PL-6		SAFETY PLAN SAFETY HARDWARE PLACEMENT
S-CC-1		CRASH CUSHION
S-GR31-1		W-BEAM GUARDRAIL
S-GRS-3		SPECIAL CASE GUARDRAIL FOOTING
S-GRC-1		GUARDRAIL CONNECTION TO BRIDGE ENDS OR BARRIER WALL
S-GRT-2	11-30-14	TYPE 38 GUARDRAIL TERMINAL
S-GRT-2P		EARTH PAD FOR TYPE 38 TERMINAL
S-GRT-3		TYPE 21 GUARDRAIL TERMINAL
S-GRT-3P		EARTH PAD FOR TYPE 21 TERMINAL
S-GRT-4	11-06-14	TYPE 13 GUARDRAIL TERMINAL (TRAILING END)
S-GRA-3		GUARDRAIL ANCHOR FOR TYPE 12, 13 AND IN-LINE TERMINALS
S-MB-3	10-26-99	STANDARD CONCRETE GLARE SCREEN MEDIAN BARRIER
S-MB-4	05-27-01	STANDARD CONCRETE GLARE SCREEN MEDIAN BARRIER (BRIDGE PIER PROTECTION)

TRAFFIC CONTROL APPURTENANCES

T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-FO-1		FIBER OPTIC AERIAL ENTRANCE DETAILS
T-FO-2		FIBER OPTIC UNDERGROUND ENTRANCE DETAILS
T-FO-3		FIBER OPTIC AERIAL CONNECTION DETAILS
T-FO-4		FIBER OPTIC PULL BOX, CABINET & POLE DETAILS
T-L-1	12-04-13	STANDARD LIGHTING FOUNDATION DETAILS
T-L-1SA	09-11-13	STANDARD LIGHTING DETAILS FOR SINGLE ARM SUPPORTS
T-L-1TM		STANDARD LIGHTING DETAILS TENON MOUNTED OFFSET LIGHTING SUPPORTS
T-L-3	04-15-96	STANDARD LIGHTING DETAILS PULL BOXES
T-L-4	05-25-11	STANDARD LIGHTING DETAILS CONDUIT, CABLE INSTALLATION
T-M-1	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	07-24-14	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS
T-M-4	07-24-14	STANDARD INTERSECTION PAVEMENT MARKINGS
T-PBR-1	06-30-09	INTERCONNECTED PORTABLE BARRIER RAIL
T-PBR-2	11-01-11	DETAIL FOR VERTICAL PANELS AND FLEXIBLE DELINEATORS
T-S-6	02-12-91	STANDARD MOUNTING DETAILS - BOLTED EXTRUDED PANELS
T-S-8	07-15-91	HIGHWAY SHIELDS USED ON STATE NUMBERED ROUTES AND ARROWS
T-S-9	06-10-14	STANDARD LAYOUT GROUND MOUNTED SIGNS
T-S-10	04-04-12	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN
T-S-12	05-27-03	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, SQUARE TUBES
T-S-13	07-20-12	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, I-BEAMS
T-S-14	08-17-12	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, WF-BEAMS
T-S-16	06-03-14	GROUND MOUNTED ROADSIDE SIGN AND DETAILS
T-S-16A	7-24-14	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-17	07-19-13	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-19	07-19-13	STANDARD STEEL SIGN SUPPORTS
T-S-20	11-01-11	SIGN DETAILS
T-S-23A	07-19-13	MULTI-DIRECTIONAL SLIP BASE BREAKAWAY SQUARE TUBE SIGN SUPPORT
T-S-23B	07-19-13	MULTI-DIRECTIONAL SLIP BASE BREAKAWAY STRUCTURAL PIPE SIGN SUPPORT
T-S-23C	07-19-13	BREAKAWAY U-POST SIGN SUPPORTS
T-SG-2	07-29-04	LOOP LEAD-INS, CONDUIT AND PULL BOXES
T-SG-3	11-11-04	STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS
T-SG-3A		ALTERNATE DETECTION DETAILS
T-SG-4		SPAN WIRE AND MESSENGER CABLE DETAILS
T-SG-5	12-04-13	CONTROLLER CABINET DETAILS
T-SG-7	11-01-11	SIGNAL HEAD ASSEMBLIES AND PEDESTRIAN PUSH BUTTON SIGNS
T-SG-7A	11-01-11	TYPICAL SIGNAL HEAD PLACEMENT
T-SG-8	12-04-13	STRAIN POLE DETAILS FOR SPAN MOUNTED SIGNALS
T-SG-9	12-04-13	DETAILS OF CANTILEVER SIGNAL SUPPORT
T-SG-9A	12-04-13	MISCELLANEOUS SIGNAL DETAILS
T-SG-10	06-11-14	MAST ARM POLE AND STRAIN POLES FOUNDATION DETAILS
T-SG-11	07-08-14	MAINTENANCE OF EXISTING SIGNALS DURING HIGHWAY CONSTRUCTION
T-SG-12	11-01-11	TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS
T-SG-13	06-01-09	FLASHING BEACON DETAIL
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-14	03-13-09	TWO-OUTSIDE LANE CLOSURE ON INTERSTATES AND EXPRESSWAYS (PORTABLE BARRIER RAIL)
T-WZ-15	04-02-12	INTERIOR LANE CLOSURE ON FREEWAYS OR EXPRESSWAYS
T-W-16	03-13-09	LANE SHIFT ON DIVIDED HIGHWAYS AND FREEWAYS
T-WZ-18	03-13-09	SHOULDER CLOSURE DETAIL FOR FREEWAYS AND DIVIDED HIGHWAYS
T-WZ-21	03-15-11	LANE CLOSURE WITH LEFT HAND MERGE AND LANE SHIFT
T-WZ-32	10-29-13	TRAFFIC CONTROL PLAN SIGNAL LAYOUT FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-33	05-27-98	TRAFFIC CONTROL PLAN FOR CLOSE INTERSECTION CONDITIONS USING TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-34	09-01-05	TRAFFIC CONTROL PLAN GENERAL NOTES FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-35	04-02-12	TRAFFIC CONTROL PLAN PAY ITEM AND SIGN DETAILS FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE

EROSION PREVENTION AND SEDIMENT CONTROL

EC-STR-2	08-01-12	SEDIMENT FILTER BAG
EC-STR-3B	08-01-12	SILT FENCE
EC-STR-3C	08-01-12	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-6	08-01-12	ROCK CHECK DAM
EC-STR-6A	08-01-12	ENHANCED ROCK CHECK DAM
EC-STR-8	06-10-14	FILTER SOCK
EC-STR-11A	08-01-12	CULVERT PROTECTION TYPE 2
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-37	08-01-12	SEDIMENT TUBE
EC-STR-39	08-01-12	CURB INLET PROTECTION TYPE 1 & 2
EC-STR-39A	08-01-12	CURB INLET PROTECTION TYPE 3 & 4
EC-STR-41		CATCH BASIN FILTER ASSEMBLY (TYPE 1)
EC-STR-41A		CATCH BASIN FILTER ASSEMBLY (TYPE 1) SLIPCOVER DETAILS
EC-STR-44		CATCH BASIN FILTER ASSEMBLY (TYPE 4)
EC-STR-44A		CATCH BASIN FILTER ASSEMBLY (TYPE 4) SLIPCOVER DETAILS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	PHSIP-3602(5)	2A

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
1	201-01	CLEARING AND GRUBBING	LS	1
	202-01	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1
	202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	80
	202-03.01	REMOVAL OF ASPHALT PAVEMENT	S.Y.	8210
	202-08.15	REMOVAL OF CURB AND GUTTER	L.F.	995
	203-06	WATER	M.G.	70
	203-10	EMBANKMENT (COMPACTED IN PLACE)	C.Y.	13940
2	209-03.23	FILTER SOCK (24 INCH)	L.F.	130
	209-05	SEDIMENT REMOVAL	C.Y.	165
	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	2620
	209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	6585
2	209-08.07	ROCK CHECK DAM PER	EACH	2
	209-08.08	ENHANCED ROCK CHECK DAM	EACH	23
2 3	209-09.01	SANDBAGS	BAG	1000
	209-09.40	CURB INLET PROTECTION (TYPE 1)	EACH	1
2	209-09.41	CURB INLET PROTECTION (TYPE 2)	EACH	4
	209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	7
	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	7595
22	307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	2435
	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	2038
	313-03	TREATED PERMEABLE BASE	S.Y.	3130
	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	16
	402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	63
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	13
4	406-04.02	HIGH FRICTION SURFACE TREATMENT	S.Y.	1056
5	407-20.05	SAW CUTTING ASPHALT PAVEMENT	L.F.	550
6	411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	620
	411-01.10	ACS MIX(PG64-22) GRADING D	TON	1427
7	411-02.10	ACS MIX(PG70-22) GRADING D	TON	869
8	415-01.01	COLD PLANING BITUMINOUS PAVEMENT	TON	1475
	501-01.03	PORTLAND CEMENT CONCRETE PAVEMENT (PLAIN) 10"	S.Y.	3071
	604-07.01	RETAINING WALL (WALLS 1, 2, & 3)	S.F.	2456
	604-09.10	CLASS A CONCRETE (ISLAND - 6")	C.Y.	6
	607-03.30	18" PIPE CULVERT	L.F.	663
	607-05.30	24" PIPE CULVERT	L.F.	13
	607-07.30	36" PIPE CULVERT	L.F.	24
	607-16.01	23"X 14" HORIZONTAL OVAL CONCRETE PIPE CULVERT	L.F.	13
9	610-07.03	18" PIPE DRAIN (BRIDGE DRAIN)	L.F.	125
	611-02.10	JUNCTION BOX, TYPE 1	EACH	1
	611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)	C.Y.	5
	611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	LB.	625
	611-07.63	36IN ENDWALL (CROSS DRAIN) 3:1	EACH	1
	611-07.64	36IN ENDWALL (CROSS DRAIN) 4:1	EACH	1
	611-07.65	36IN ENDWALL (CROSS DRAIN) 6:1	EACH	1
	611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	5
	611-12.03	CATCH BASINS, TYPE 12, > 8' - 12' DEPTH	EACH	2
	611-14.01	CATCH BASINS, TYPE 14, 0' - 4' DEPTH	EACH	1
	701-01.01	CONCRETE SIDEWALK (4 ")	S.F.	9760
	701-02	CONCRETE DRIVEWAY	S.F.	805
	701-02.03	CONCRETE CURB RAMP	S.F.	1570
	702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	140
	703-01	CEMENT CONCRETE DITCH PAVING	C.Y.	25
	705-01.01	GUARDRAIL AT BRIDGE ENDS	L.F.	108
	705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	2702
	705-04.03	GUARDRAIL TERMINAL (TYPE 13)	EACH	6
	705-04.04	GUARDRAIL TERMINAL (TYPE 21)	EACH	1
	705-04.07	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH	4
	705-04.09	EARTH PAD FOR TYPE 38 GR END TREATMENT	EACH	4
	705-04.21	GUARDRAIL DELINEATION ENHANCEMENT	L.F.	3060
	705-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	313

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
10	705-08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	17
	706-01	GUARDRAIL REMOVED	L.F.	920
	707-01.11	CHAIN LINK FENCE (6 FOOT)	L.F.	595
	707-01.12	END & CORNER POST ASSEMBLY(CHAIN-LINK FENCE 6')	EACH	2
	707-06.01	REMOVAL OF FENCE (CHAIN LINK)	L.F.	605
1	707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	655
9	709-01.01	RUBBLE STONE RIP-RAP	C.Y.	6
11	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	612
	710-02	AGGREGATE UNDERDRAINS (WITH PIPE)	L.F.	1540
	710-05	LATERAL UNDERDRAIN	L.F.	385
	710-06.11	LATERAL UNDERDRAIN ENDWALL (2:1)	EACH	8
	710-06.12	LATERAL UNDERDRAIN ENDWALL (3:1)	EACH	2
	710-06.15	LATERAL UNDERDRAIN ENDWALL (6:1)	EACH	1
21	711-04	CONCRETE GLARE SCREEN MEDIAN BARRIER WALL	L.F.	85
	711-04.01	CONCRETE GLARE SCREEN MEDIAN BARRIER @ BRIDGE PIERS	L.F.	130
	712-01	TRAFFIC CONTROL	LS	1
12	712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	6263
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	376
	712-05.01	WARNING LIGHTS (TYPE A)	EACH	19
	712-06	SIGNS (CONSTRUCTION)	S.F.	1680
	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	168
	712-08.03	ARROW BOARD (TYPE C)	EACH	4
	713-01.01	CLASS A CONCRETE (FOUNDATION FOR SIGN SUPPORTS)	C.Y.	1
	713-01.02	STEEL BAR REINFORCEMENT(FOUNDATION FOR SIGN SUPPORTS	LB.	251
	713-02.14	FLEXIBLE DELINEATOR (WHITE)	EACH	239
	713-02.21	SIGN POST ENHANCEMENTS	L.F.	168
	713-06	STEEL I-BEAMS & WF-BEAMS(BREAKAWAY) SIGN SUPPORT	LB.	1475
	713-11.02	PERFORATED/KNOCKOUT SQUARE TUBE POST	LB.	1743
	713-11.21	P POST SLIP BASE	EACH	15
	713-13.02	FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	S.F.	264
13	713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	S.F.	415
	713-14	EXTRUDED ALUMINUM PANEL SIGNS	S.F.	180
	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
	713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	6
	714-09.03	LUIMINAIRES (250 WATT)	EACH	4
14	716-01.06	TEMPORARY RAISED PAVEMENT MARKER,WHITE	EACH	595
	716-01.07	TEMPORARY RAISED PAVEMENT MARKER,YELLOW	EACH	185
15	716-01.23	Snwplwble Pvmt Mrkrs (Bi-Dir)(2 Color)	EACH	160
	716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	160
	716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	L.F.	250
16	716-02.04	PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	40
	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	205
	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	22
16 17	716-02.07	PLASTIC PAVEMENT MARKING (24" BARRIER LINE)	L.F.	690
16	716-02.08	PLASTIC PAVEMENT MARKING (8" DOTTED LINE)	L.F.	70
15 16	716-02.23	PLASTIC PAVEMENT MARKING (12IN BARRIER LINE)	L.F.	1500
	716-03.01	PLASTIC WORD PAVEMENT MARKING (ONLY)	EACH	2
16	716-03.03	PLASTIC WORD PAVEMENT MARKING (STOP AHEAD)	EACH	1
	716-04.12	PLASTIC PAVEMENT MARKING (YIELD LINE)	S.F.	15
	716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	3
14	716-05.02	PAINTED PAVEMENT MARKING (8" BARRIER LINE)	L.F.	30000
	716-05.05	PAINTED PAVEMENT MARKING (STOP LINE)	L.F.	24
	716-08.20	REMOVAL OF PAVEMENT MARKING (LINE)	L.M.	3
	716-10.30	TRUNCATED DOME DETECTABLE WARNING MAT	S.F.	110
18	716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	1.9
	716-13.01	SPRAY THERMO PVMT MRKNG (60 mil) (4IN LINE)	L.M.	1.5
	716-13.03	SPRAY THERMO PVMT MRKNG (60 mil) (8IN BARRIER LINE)	L.F.	0.5
	716-13.04	SPRAY THERMO PVMT MRKNG (60 mil) (4IN DOTTED LINE)	L.F.	50
	717-01	MOBILIZATION	LS	1
	725-14.70	TRENCHING	L.F.	60
19	725-20.04	CCTV POLE REMOVE AND RELOCATE	EACH	1

SEE SHEET 2A1 FOR FOOTNOTES

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ESTIMATED ROADWAY QUANTITIES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	PHSIP-3602(5)	2A1

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	725-20.06	CCTV MAINTENANCE WORKPAD	EACH	1
19	725-20.43	PULL BOX (TYPE C)	EACH	1
	725-20.44	PULL BOX (TYPE D)	EACH	1
	725-21.32	CAT 6 CABLE	L.F.	350
	725-24.08	CABINET MODIFICATION (TYPE B - CCTV)	EACH	1
	725-24.55	AS-BUILT PLANS	LS	1
	730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	12
	730-02.30	SIGNAL HEAD ASSEMBLY (140 A4 WITH BACKPLATE)	EACH	2
	730-03.21	INSTALL PULL BOX (TYPE B)	EACH	18
	730-03.24	INSTALL PULL BOX (FIBER OPTIC-TYPE B)	EACH	6
	730-05.01	ELECTRICAL SERVICE CONNECTION	EACH	2
	730-08.01	SIGNAL CABLE - 3 CONDUCTOR	L.F.	1640
	730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	990
	730-08.04	SIGNAL CABLE - 9 CONDUCTOR	L.F.	1120
	730-11.01	STEEL CONDUIT RISER ASSEMBLY	EACH	2
	730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	520
	730-12.07	CONDUIT 1" DIAMETER (RGS)	L.F.	1315
	730-12.08	CONDUIT 2" DIAMETER (RGS)	L.F.	190
	730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	1100
	730-13.02	VEHICLE DETECTOR (VIDEO)	EACH	2
	730-15.32	CABINET (EIGHT PHASE BASE MOUNTED)	EACH	2
	730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	2
	730-21.10	WOOD POLE (POWER SOURCE, 25' LENGTH)	EACH	1
	730-23.30	PEDESTAL POLE (PEDESTRIAN PUSH BUTTON AND SIGNAL HEAD)	EACH	4
	730-23.72	CANTILEVER SIGNAL SUPPORT (2 @ 35' & 15')	EACH	1
	730-23.96	CANTILEVER SIGNAL SUPPORT (3 @ 50', 15' & 15')	EACH	1
	730-23.97	CANTILEVER SIGNAL SUPPORT (3 @ 60', 50' & 15')	EACH	1
	730-23.98	CANTILEVER SIGNAL SUPPORT (4 @ 60', 30', 15', & 15')	EACH	1
	730-26.05	COUNTDOWN PEDESTRIAN SIGNAL	EACH	4
	730-26.09	PEDESTRIAN PUSHBUTTON WITH 15IN SIGN	EACH	4
	730-40	TEMPORARY TRAFFIC SIGNAL SYSTEM	EACH	2
2	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	515
	740-11.03	TEMPORARY SEDIMENT TUBE 18IN (DESCRIPTION)	L.F.	1820
	793-11.05	6IN PEDESTAL W/TERMINAL	EACH	2
	798-06.13	FIBER OPTIC CABLE (12F HYBRID WITH 6MM & 6SM)	L.F.	650
	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	210
	801-02.15	FERTILIZER	TON	2
23	801-03	WATER (SEEDING & SODDING)	M.G.	108
	803-01	SODDING (NEW SOD)	S.Y.	8750
20	806-02.03	PROJECT MOWING	CYCL	4

FOOTNOTES

1. INCLUDES TREE REMOVAL
2. SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
3. TO BE USED FOR OFFSITE DIVERSION
4. TO BE USED ON L.R. 03602 FROM STA. 113+25.09 TO STA. 115+88.25
5. TO BE USED AS DIRECTED BY ENGINEER
6. INCLUDES 371 TONS FOR RESURFACING S.R. 153
7. TO BE USED FOR RESURFACING S.R. 153
8. INCLUDES 1239 TONS FOR COLD PLANING S.R. 153
9. STANDARD DRAWING STD-1-7 IS TO BE USED FOR BURIAL OF THE OUTLET PIPE AND FOR END TREATMENT DETAILS.
10. THIS ITEM SHALL BE A PORTABLE ENERGY ABSORBING TERMINAL MEETING THE REQUIREMENTS OF NCHRP 350 FOR TEST LEVEL 3. EXAMPLES WOULD BE A QUAD-GUARD, A REACT 350 OR A TRACC. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS SHOWN ON THE MANUFACTURER'S DRAWING.
11. INCLUDES 312 TONS FOR BRIDGE CONSTRUCTION
12. INCLUDES 48 L.F. FOR BRIDGE CONSTRUCTION
13. INCLUDES 120 SF FOR TEMPORARY TRAFFIC CONTROL
14. TO BE USED FOR TEMPORARY TRAFFIC CONTROL
15. TO BE USED FOR RESTRIPING S.R. 153
16. THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
17. INCLUDES 385 L.F. FOR RESTRIPING S.R. 153
18. INCLUDES 1.4 L.M. FOR RESTRIPING S.R. 153
19. ITEMS TO BE STORED BY TDOT CONTACT JIM MICKA AT (423)510-1247 1 WEEK PRIOR TO REMOVAL.
20. ITEM INCLUDES LITTER AND TRASH REMOVAL. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY BUT WILL BE INCLUDED IN THE COST OF ITEM NO. 806-02.03, PROJECT MOWING, CYCL.
21. ITEM TO INCLUDE THE COST OF REMOVING THE EXISTING MEDIAN BARRIER WALL.
22. INCLUDES 100 TONS FOR PAVEMENT TRANSITIONS AT BRIDGE ENDS
23. INCLUDES 21 M.G. FOR TEMPORARY EROSION CONTROL

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ESTIMATED ROADWAY QUANTITIES

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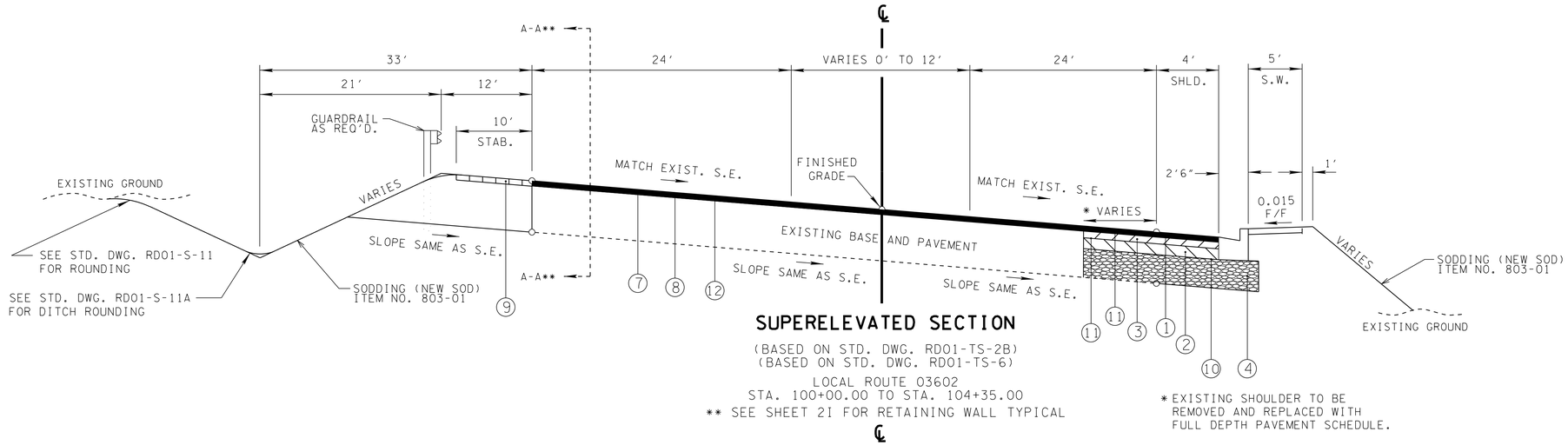
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	2
CONST.	2015	PHSIP-3602(5)	2D



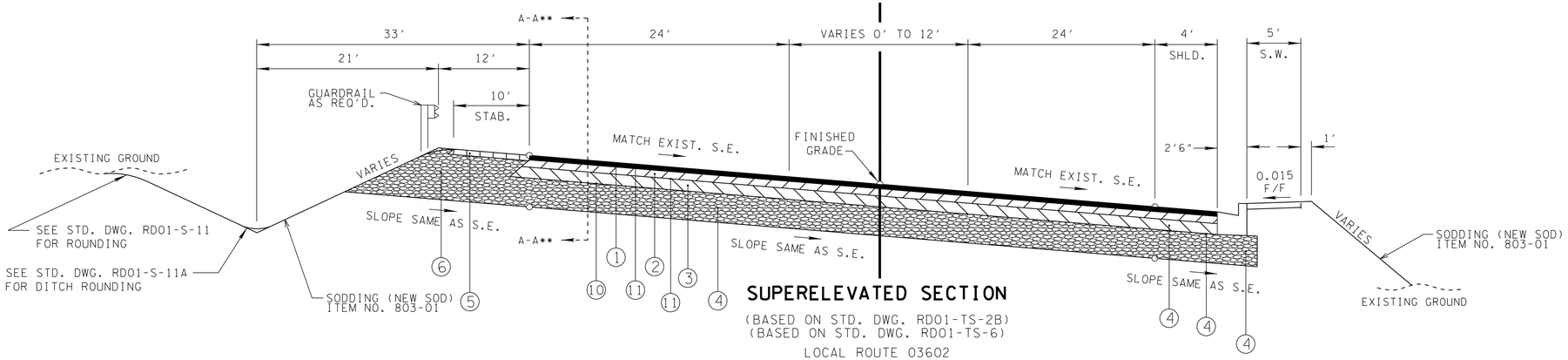
SUPERELEVATED SECTION

(BASED ON STD. DWG. RD01-TS-2B)
(BASED ON STD. DWG. RD01-TS-6)

LOCAL ROUTE 03602
STA. 100+00.00 TO STA. 104+35.00

** SEE SHEET 2I FOR RETAINING WALL TYPICAL

* EXISTING SHOULDER TO BE REMOVED AND REPLACED WITH FULL DEPTH PAVEMENT SCHEDULE.



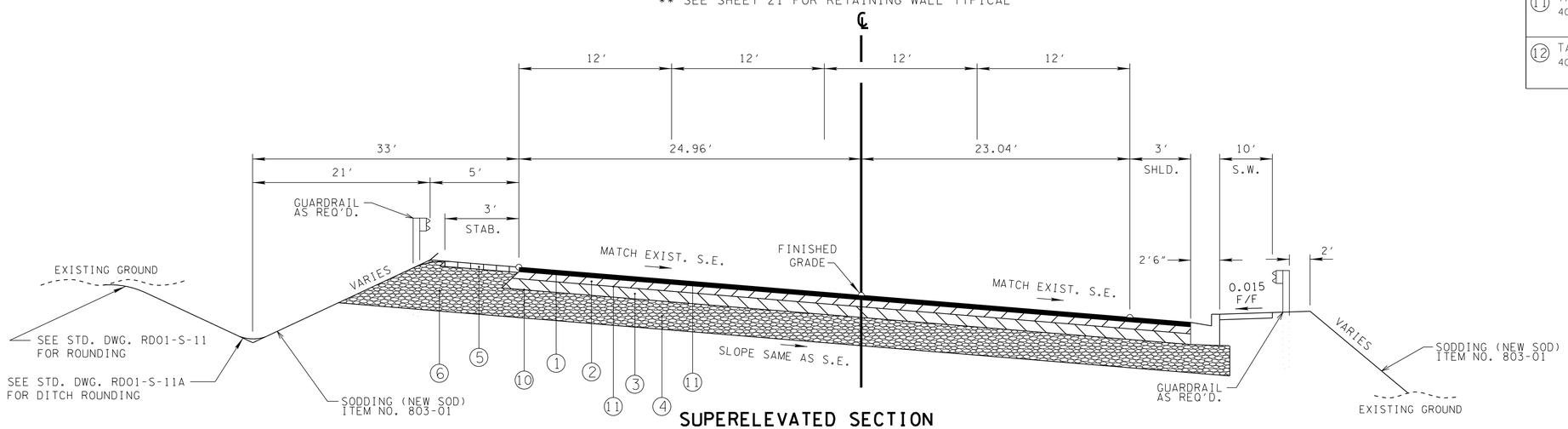
SUPERELEVATED SECTION

(BASED ON STD. DWG. RD01-TS-2B)
(BASED ON STD. DWG. RD01-TS-6)

LOCAL ROUTE 03602
STA. 104+35.00 TO STA. 106+60.73

TRANSITIONS TO FULL DEPTH PAVEMENT FROM STA. 104+35.00 TO STA. 106+60.73

** SEE SHEET 2I FOR RETAINING WALL TYPICAL



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD01-TS-2B)
(BASED ON STD. DWG. RD01-TS-6)

LOCAL ROUTE 03602
STA. 106+60.73 TO STA. 107+60.77

PROPOSED PAVING SCHEDULE

1	BITUM. SURFACE @ 1.25" THICK (APPROX. 132.5 LBS/SY) 411-01.10 ACS MIX (PG64-22) GRADING "D"
2	BITUM. BINDER @ 2" THICK (APPROX. 226 LBS/SY) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) GRADING "BM-2"
3	BITUMINOUS BASE @ 3" THICK (APPROX. 345 LBS/SY) 307-01.01 ASPHALT CONCRETE MIX (PG64-22) GRADING "A"
4	MINERAL AGGREGATE BASE @ 8" THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"
5	BITUM. SURFACE @ 1.50" THICK (APPROX. 154.5 LBS/SY) 411-01.07 ASPHALT CEMENT (PG64-22) GRADING "E"
6	MINERAL AGGREGATE BASE @ 12.75" THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"
7	BITUM. SURFACE @ 1.25" THICK (APPROX. 132.5 LBS/SY) 411-02.10 ACS MIX (PG70-22) GRADING "D"
8	COLD PLANING @ -1.25" THICK 415-01.01
9	BITUM. SURFACE @ 1.25" THICK (APPROX. 128.8 LBS/SY) 411-01.07 ASPHALT CEMENT (PG64-22) GRADING "E"
10	PRIME COAT 402-01 BITUMINOUS MATERIAL FOR PRIME COAT @ 0.30 - 0.35 GAL/SY 402-02 AGGREGATE MATERIAL FOR PRIME COAT (PC) (8-12 LB/SY)
11	TACK COAT @ 0.07 GAL/SY 403-01 BITUMINOUS MATERIAL FOR TACK COAT
12	TACK COAT @ 0.10 GAL/SY 403-01 BITUMINOUS MATERIAL FOR TACK COAT

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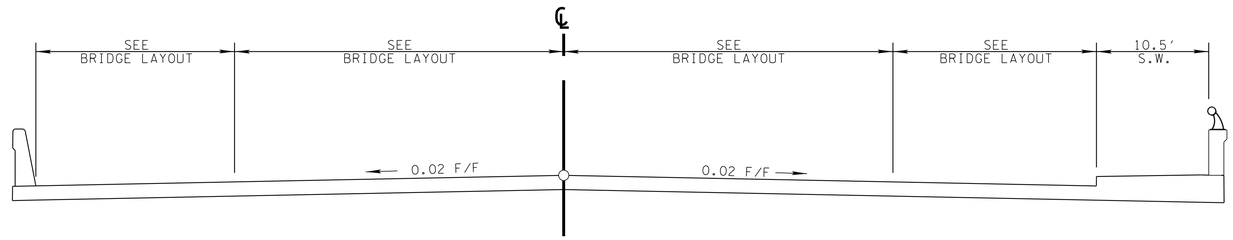
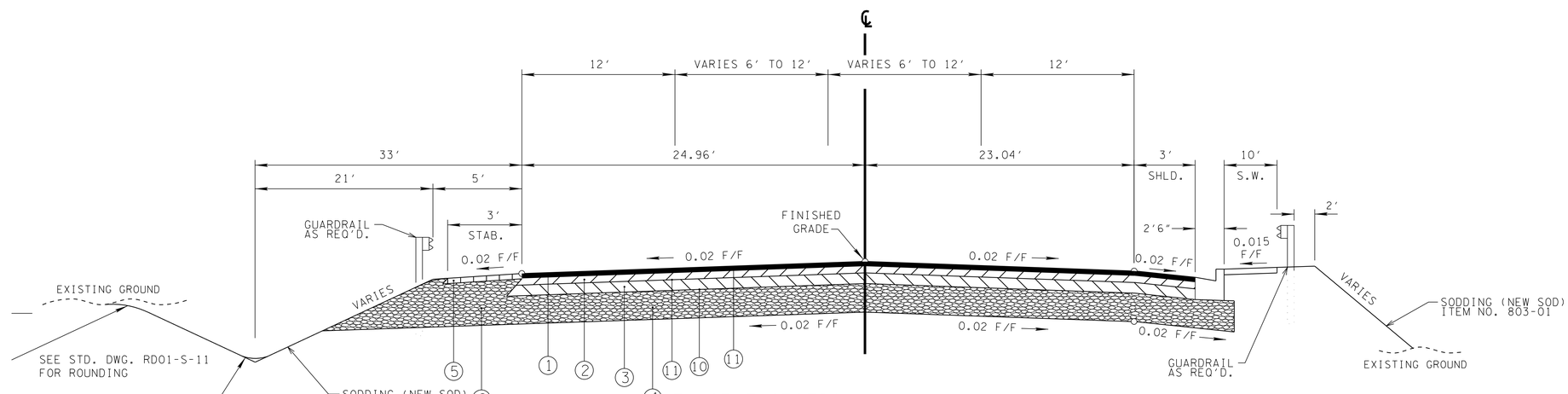
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	2A
CONST.	2015	PHSIP-3602(5)	2E



TANGENT SECTION

(SEE BRIDGE PLANS)
LOCAL ROUTE 03602
STA. 107+60.77 TO STA. 109+54.77



TANGENT SECTION

(BASED ON STD. DWG. RD01-TS-2B)
(BASED ON STD. DWG. RD01-TS-6)

LOCAL ROUTE 03602
STA. 109+54.77 TO STA. 110+75.85

PROPOSED PAVING SCHEDULE	
1 BITUM. SURFACE @ 1.25″ THICK (APPROX. 132.5 LBS/SY) 411-01.10 ACS MIX (PG64-22) GRADING "D"	5 BITUM. SURFACE @ 1.50″ THICK (APPROX. 154.5 LBS/SY) 411-01.07 ASPHALT CEMENT (PG64-22) GRADING "E"
2 BITUM. BINDER @ 2″ THICK (APPROX. 226 LBS/SY) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) GRADING "BM-2"	6 MINERAL AGGREGATE BASE @ 12.75″ THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"
3 BITUMINOUS BASE @ 3″ THICK (APPROX. 345 LBS/SY) 307-01.01 ASPHALT CONCRETE MIX (PG64-22) GRADING "A"	10 PRIME COAT 402-01 BITUMINOUS MATERIAL FOR PRIME COAT @ 0.30 - 0.35 GAL/SY 402-02 AGGREGATE MATERIAL FOR PRIME COAT (PC) (8-12 LB/SY)
4 MINERAL AGGREGATE BASE @ 8″ THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"	11 TACK COAT @ 0.07 GAL/SY 403-01 BITUMINOUS MATERIAL FOR TACK COAT

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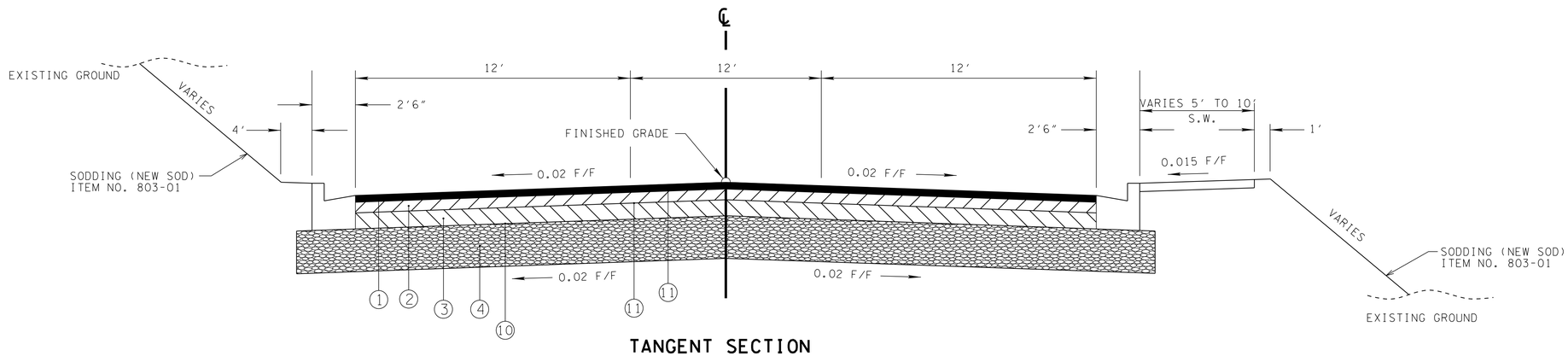
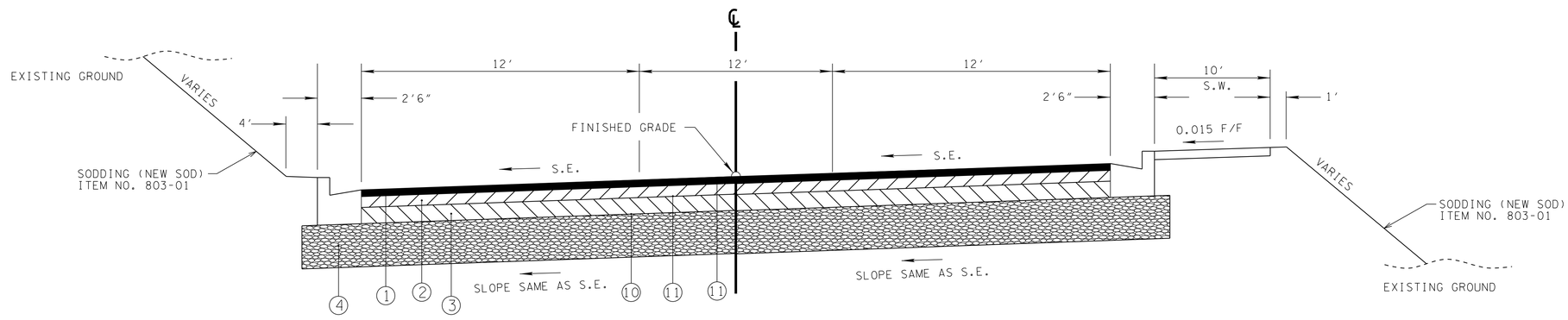
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	2B
CONST.	2015	PHSIP-3602(5)	2F



TANGENT SECTION

(BASED ON STD. DWG. RD01-TS-6A)

LOCAL ROUTE 03602
STA. 110+75.85 TO STA. 113+25.09
STA. 115+88.25 TO STA. 116+09.57



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD01-TS-6A)

LOCAL ROUTE 03602
STA. 113+25.09 TO STA. 115+88.25

PROPOSED PAVING SCHEDULE	
1 BITUM. SURFACE @ 1.25" THICK (APPROX. 132.5 LBS/SY) 411-01.10 ACS MIX (PG64-22) GRADING "D"	4 MINERAL AGGREGATE BASE @ 8" THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"
2 BITUM. BINDER @ 2" THICK (APPROX. 226 LBS/SY) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) GRADING "BM-2"	10 PRIME COAT 402-01 BITUMINOUS MATERIAL FOR PRIME COAT @ 0.30 - 0.35 GAL/SY 402-02 AGGREGATE MATERIAL FOR PRIME COAT (PC) (8-12 LB/SY)
3 BITUMINOUS BASE @ 3" THICK (APPROX. 345 LBS/SY) 307-01.01 ASPHALT CONCRETE MIX (PG64-22) GRADING "A"	11 TACK COAT @ 0.07 GAL/SY 403-01 BITUMINOUS MATERIAL FOR TACK COAT

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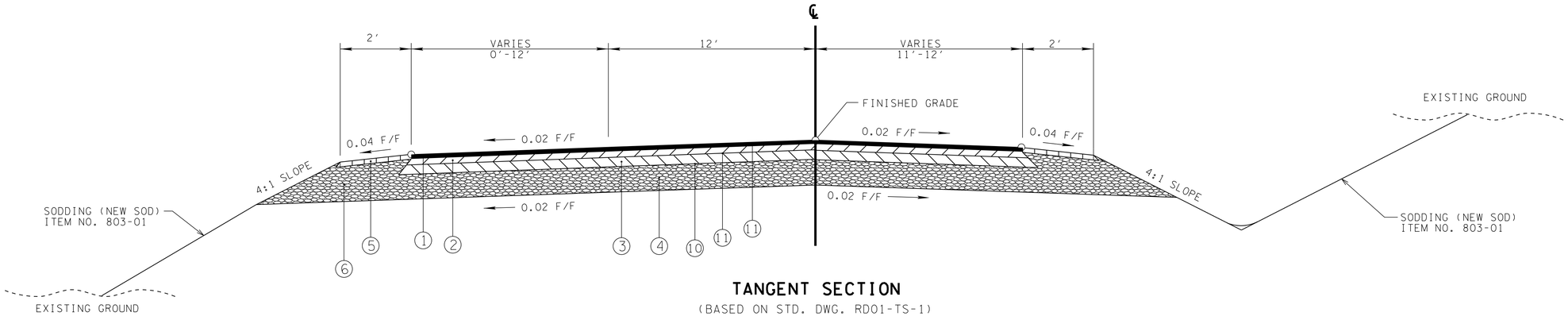
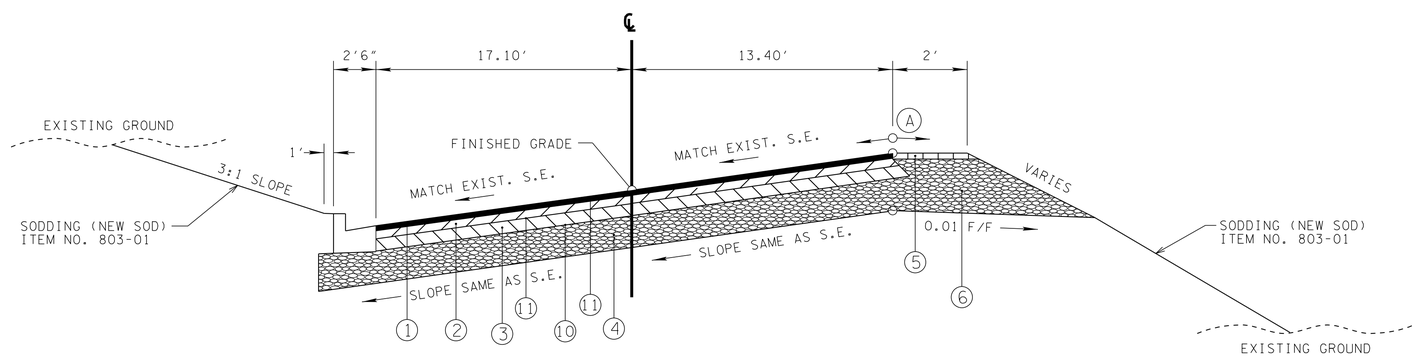
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	2C
CONST.	2015	PHSIP-3602(5)	2G



TANGENT SECTION

(BASED ON STD. DWG. RD01-TS-1)

MEHARRY ROAD
STA. 10+18.00 TO STA. 11+51.16



(BASED ON STD. DWG. RD01-TS-1)

EAST SHEPHERD ROAD
STA. 200+18.00 TO STA. 201+33.81

PROPOSED PAVING SCHEDULE	
(1) BITUM. SURFACE @ 1.25" THICK (APPROX. 132.5 LBS/SY) 411-01.10 ACS MIX (PG64-22) GRADING "D"	(5) BITUM. SURFACE @ 1.50" THICK (APPROX. 154.5 LBS/SY) 411-01.07 ASPHALT CEMENT (PG64-22) GRADING "E"
(2) BITUM. BINDER @ 2" THICK (APPROX. 226 LBS/SY) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) GRADING "BM-2"	(6) MINERAL AGGREGATE BASE @ 12.75" THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"
(3) BITUMINOUS BASE @ 3" THICK (APPROX. 345 LBS/SY) 307-01.01 ASPHALT CONCRETE MIX (PG64-22) GRADING "A"	(10) PRIME COAT 402-01 BITUMINOUS MATERIAL FOR PRIME COAT @ 0.30 - 0.35 GAL/SY 402-02 AGGREGATE MATERIAL FOR PRIME COAT (PC) (8-12 LB/SY)
(4) MINERAL AGGREGATE BASE @ 8" THICK 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"	(11) TACK COAT @ 0.07 GAL/SY 403-01 BITUMINOUS MATERIAL FOR TACK COAT

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TYPICAL SECTIONS

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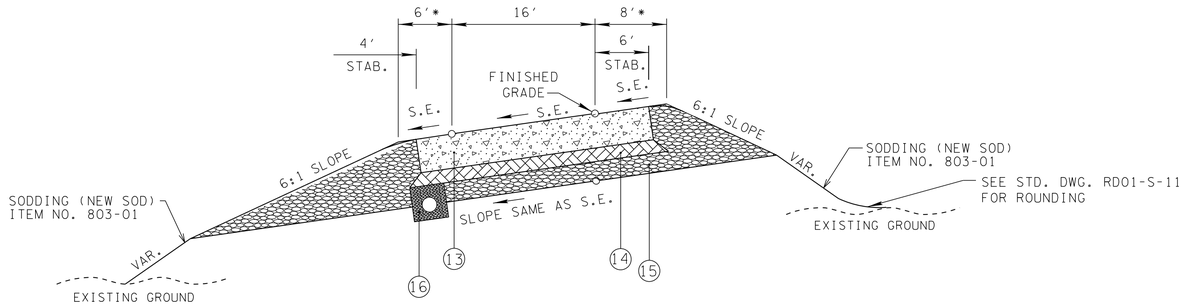
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	2D
CONST.	2015	PHSIP-3602(5)	2H



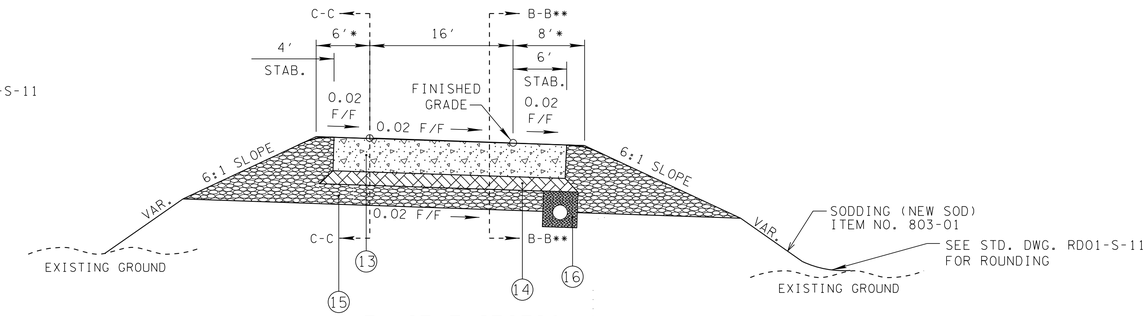
SUPERELEVATED SECTION

(BASED ON STD. DWG. RD01-TS-4)

RAMP B
STA. 400+21.92 TO STA. 400+96.92

RAMP C
STA. 500+23.50 TO STA. 500+98.50

*9.5' OUTSIDE SHLD. AND 12.5' INSIDE SHLD. ON RAMP C.



TANGENT SECTION

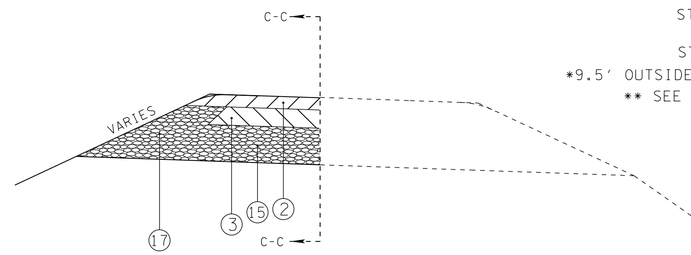
(BASED ON STD. DWG. RD01-TS-4)

RAMP B
STA. 400+96.92 TO STA. 402+31.71

RAMP C
STA. 500+98.50 TO STA. 502+00.85

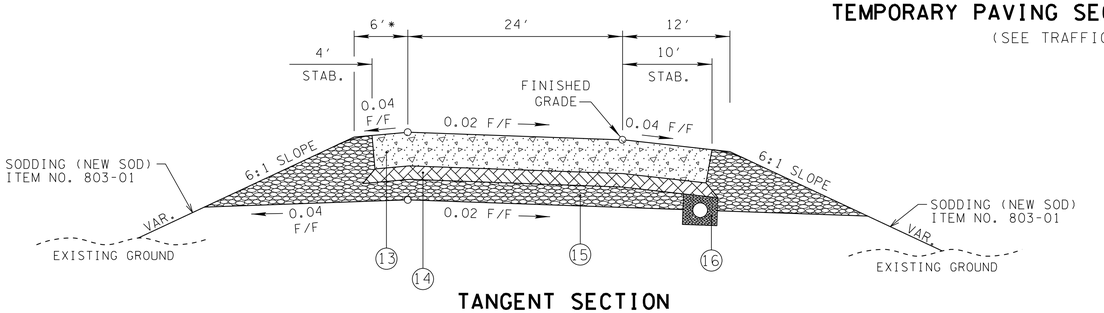
*9.5' OUTSIDE SHLD. AND 12.5' INSIDE SHLD. ON RAMP C.

** SEE SHEET 2I FOR RETAINING WALL TYPICAL



TEMPORARY PAVING SECTION FOR RAMPS B AND C

(SEE TRAFFIC CONTROL PLAN)



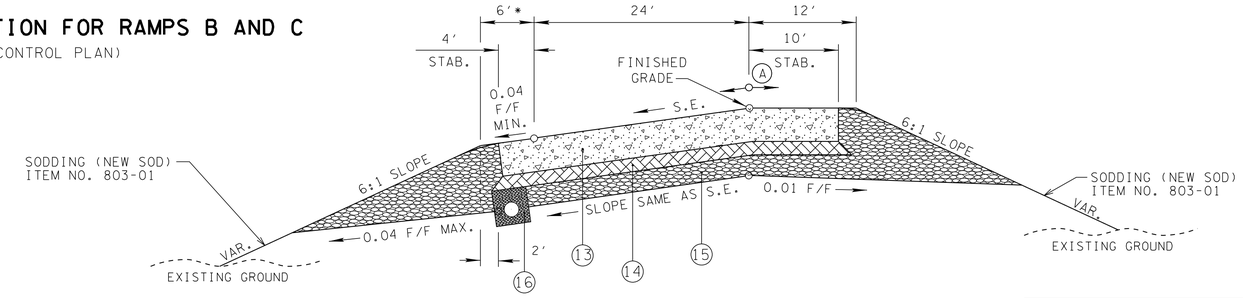
TANGENT SECTION

(BASED ON STD. DWG. RD01-TS-4)

RAMP A
STA. 303+23.72 TO STA. 306+30.81

RAMP D
STA. 604+92.13 TO STA. 607+02.37

*12.5' SHLD. ON RAMP D.



SUPERELEVATED SECTION

(BASED ON STD. DWG. RD01-TS-4)

RAMP A
STA. 306+30.81 TO STA. 307+05.81

RAMP D
STA. 607+02.37 TO STA. 607+82.37

*12.5' SHLD. ON RAMP D.

PROPOSED PAVING SCHEDULE	
(2) BITUM. BINDER @ 2" THICK (APPROX. 226 LBS/SY) 307-01.08 ASPHALT CONCRETE MIX (PG64-22) GRADING "BM-2"	(15) MINERAL AGGREGATE BASE @ 6" THICK 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING "D"
(3) BITUMINOUS BASE @ 3" THICK (APPROX. 345 LBS/SY) 307-01.01 ASPHALT CONCRETE MIX (PG64-22) GRADING "A"	(16) AGGREGATE UNDERDRAIN WITH PIPE ITEM NO. 710-02 DETAIL "F" STD. DWG RD-UD-3
(13) PORTLAND CEMENT CONCRETE PAVEMENT @ 10" THICK 501-01.03 PORTLAND CEMENT CONCRETE PAVEMENT (PLAIN) 10"	(17) MINERAL AGGREGATE BASE @ 9" THICK 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING "D"
(14) TREATED PERMEABLE BASE @ 4" THICK 313-03 TREATED PERMEABLE BASE	

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DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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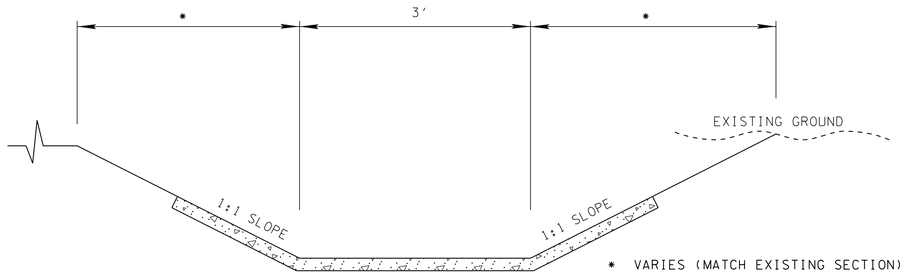
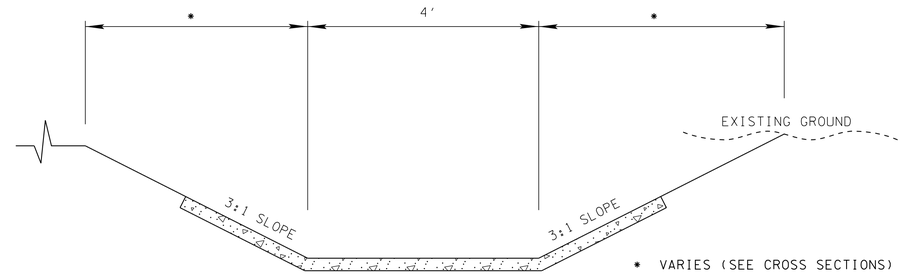
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	2D
CONST.	2015	PHSIP-3602(5)	2I



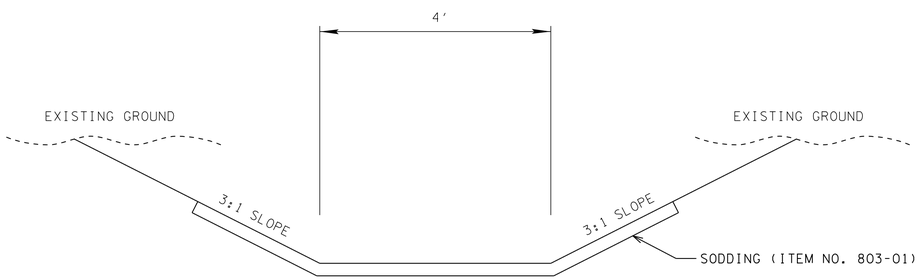
PROP. FLAT BOTTOM CONC. DITCH

RAMP D (LT.)
STA. 605+08.39 TO STA. 605+17.90



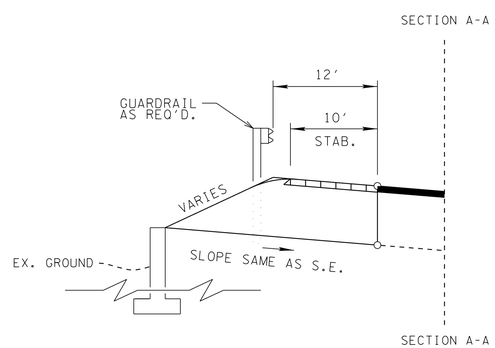
PROP. FLAT BOTTOM CONC. DITCH

LOCAL ROUTE 03602 (RT.)
STA. 101+00.00 TO STA. 103+50.00



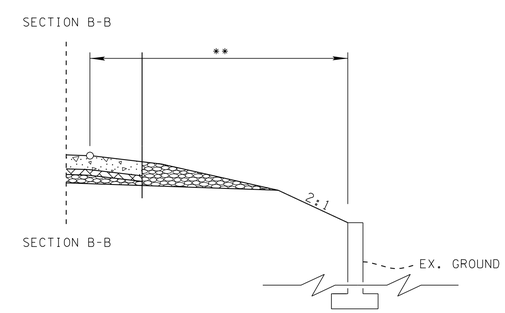
PROP. FLAT BOTTOM SOD DITCH

MEHARRY ROAD (RT.)
STA. 10+48.56 TO STA. 11+07.96



SECTION A-A

LOCAL ROUTE 03602
STA. 100+50.00 TO STA. 103+75.00



SECTION B-B

RET. WALL NO. 1
RAMP C STA. 500+90.00 TO STA. 502+00.85
** 40'

RET. WALL NO. 2
RAMP B STA. 401+65.00 TO STA. 402+31.71
** 30'

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DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	PHSIP-3602(5)	2J

GENERAL NOTES

GRADING

(1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

(2) CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.

(3) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

SEEDING AND SODDING

(4) ALL EXISTING ROADS WITHIN THE RIGHT-OF-WAY AND NOT IN THE GRADED AREA THAT ARE TO BE ABANDONED SHALL BE SCARIFIED, OBLITERATED, TOPSOILED AND SODDED. SCARIFYING AND OBLITERATING THE PAVEMENT WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS. SODDING, IN ACCORDANCE WITH SECTION 803 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEM 803-01.

(5) SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.

GUARDRAIL

(6) THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING GUARDRAIL TO REWORK SHOULDERS OR FLATTEN SLOPES UNTIL THE ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.

(7) IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE A LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL.

DRAINAGE

(8) THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

(9) EXCAVATION FOR THE INSTALLATION OF PIPES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE (PIPE CULVERTS, STORM SEWERS, CONDUITS, ALL OTHER CULVERTS AND MINOR STRUCTURES).

(10) CULVERT EXCAVATION FOR CONCRETE BOX OR SLAB TYPE CULVERTS OR BRIDGES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

(11) THE CUTTING OF INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER WILL BE MEASURED AND PAID FOR AS ITEM NO. 203-01 ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED).

(12) WHERE A CULVERT (PIPE, SLAB OR BOX) IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN ON THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION, NO INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT WILL BE MADE DUE TO SUCH CHANGE.

(13) DURING CONSTRUCTION OF DRAINAGE STRUCTURES ALL COST ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC, AT THESE STRUCTURES, DURING THE PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.

UTILITIES

(14) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.

(15) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.

(16) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

(17) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.

(18) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

MISCELLANEOUS

(19) THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.

(20) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA

ROAD CLOSURE

(21) NO LESS THAN SEVEN (7) DAYS PRIOR TO THE CLOSURE OF THE ROAD, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING INDIVIDUALS OR AGENCIES COMPLETELY DESCRIBING THE AFFECTED ROADS AND THE APPROXIMATE DURATION OF THE CONSTRUCTION: THESE PARTIES INCLUDE, BUT ARE NOT LIMITED TO: (1) LOCAL LAW ENFORCEMENT OFFICE, (2) LOCAL FIRE DEPARTMENT, (3) AMBULANCE SERVICE, (4) LOCAL SCHOOL SUPERINTENDENT, (5) UNITED STATES POSTAL SERVICE, (6) CITY OF CHATTANOOGA'S DEPARTMENT OF TRANSPORTATION, AND (7) LOCAL ROAD SUPERINTENDENT.

RIGHT - OF – WAY

(22) ALL RAMPS MUST CONFORM TO THE DEPARTMENT'S "POLICY ON FINANCING CONSTRUCTION OF PUBLIC ROAD INTERSECTIONS AND DRIVEWAYS ON HIGHWAY RESURFACING, RECONSTRUCTION AND CONSTRUCTION PROJECTS ON NEW LOCATIONS", THE MANUAL ON RULES AND REGULATIONS FOR CONSTRUCTING DRIVEWAYS ON STATE HIGHWAY RIGHT-OF-WAY, STANDARD DRAWING RP-R-1, AND OTHER ACCEPTED DESIGN AND SAFETY STANDARDS.

(23) EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED IN KIND TO A TOUCHDOWN POINT.

(24) ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.

PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS

(25) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4" LINE), L.M.

(26) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.20, PAINTED PAVEMENT MARKING (6" LINE), L.M.

FINAL PAVEMENT MARKING IF 6" ENHANCED FLATLINE THERMOPLASTIC IS USED

(27) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.02, ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

FINAL PAVEMENT MARKING IF 4" SPRAY THERMOPLASTIC (60 mil) IS USED

(28) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 4" SPRAY THERMOPLASTIC (60 mil) INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-13.01, SPRAY THERMO PVMT MRKNG (60 mil) (4IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

FINAL PAVEMENT MARKING IF 8" SPRAY THERMOPLASTIC (60 mil) IS USED

(29) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 8" SPRAY THERMOPLASTIC (60 mil) INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-13.03, SPRAY THERMO PVMT MRKNG (60 mil) (8IN BARRIER LINE), L.F. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

PAVEMENT

PAVING

(30) THE CONTRACTOR SHALL BE REQUIRED TO PAVE IN THE DIRECTION OF TRAFFIC.

(31) THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE DIRECTION OF TRAFFIC.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	PHSIP-3602(5)	2K

(32) THE CONTRACTOR SHALL ATTACH A DEVICE TO THE SCREED OF THE PAVER SUCH THAT MATERIAL IS CONFINED AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A CONSOLIDATED WEDGE-SHAPE PAVEMENT EDGE OF APPROXIMATELY 25 TO 30 DEGREES AS IT LEAVES THE PAVER (MEASURED FROM A LINE PARALLEL TO THE PAVEMENT SURFACE.) THE DEVICE SHALL MEET THE REQUIREMENTS THAT ARE CURRENTLY SET FORTH IN SPECIAL PROVISION 407SE.

RESURFACING

(33) WHERE DIRECTED BY THE TDOT ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SHAPE PUBLIC SIDE ROADS, BUSINESS ENTRANCES, AND PRIVATE DRIVES, AS WELL AS CLEANING OF EXISTING DRAINS BEFORE PLACING MATERIALS. ALL COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

(34) ALL PUBLIC SIDE ROADS SHALL BE PAVED ONE PAVER WIDTH THROUGH THE INTERSECTION AS A MINIMUM. A SATISFACTORY TRANSITION FROM THE NEW PAVEMENT TO THE EXISTING GRADE OF THE INTERSECTING PUBLIC ROAD OR BUSINESS ENTRANCE SHALL BE PROVIDED. SHOULD THE PAVEMENT OF THE INTERSECTING PUBLIC ROAD BE DISTRESSED, THE RESURFACING WIDTH MAY BE INCREASED TO THE NORMAL RIGHT OF WAY LINE.

(35) PRIVATE DRIVEWAYS, FIELD ENTRANCES, AND BUSINESS ENTRANCES WILL BE RESURFACED A PAVER WIDTH (LANE WIDTH) AS A MINIMUM. A PAVEMENT TAPER TO TRANSITION THE NEW PAVEMENT SHALL BE REQUIRED, IT SHALL BE BASED ON AN ADDITIONAL ONE FOOT OF WIDTH PER ONE INCH DEPTH OF PAVEMENT. IF THE SHOULDER IS NARROW ENOUGH THAT THE SUM OF THE SHOULDER AND THE TRANSITION ARE LESS THAN A PAVER WIDTH, THE TRANSITION SHALL OCCUR WITHIN THE PAVER WIDTH. IF THE SUM OF THE SHOULDER AND THE TRANSITION IS GREATER THAN A PAVER WIDTH (LANE WIDTH), THE TRANSITION SHALL OCCUR OUTSIDE OF THE PAVER WIDTH.

(36) ON URBAN TYPICAL SECTIONS, (CURB AND GUTTER), RESIDENTIAL DRIVEWAYS AND BUSINESS ENTRANCES SHALL HAVE A MINIMUM WIDTH OF MATERIAL NOT LESS THAN ONE FOOT USED IN THE TRANSITION TO FEATHER THE PAVEMENT EDGE.

(37) IN ALL CASES, THE LENGTH OF THE PAVEMENT TRANSITION, THE THICKNESS AND WIDTH OF THE RESURFACING AND ANY ADDITIONAL PAVEMENT MATERIALS SHALL BE AS DIRECTED BY THE TDOT ENGINEER.

SIGNING

(38) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUTOUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND. THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL EXTRUDED PANEL SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE, AS OUTLINED IN THE STANDARD SPECIFICATIONS. ALL SHIELDS ON GUIDE SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE AS OUTLINED IN THE STANDARD SPECIFICATIONS.

(39) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE LENGTHS WERE COMPUTED FROM THE CROSS-SECTIONS CONTAINED IN THE CONSTRUCTION PLANS. IN THE EVENT THE SUPPORT LENGTHS ARE 2 FEET SHORTER OR LONGER THAN SHOWN ON THE PLANS, THE ENGINEER SHALL VERIFY THE SUPPORT TYPE WITH THE ROOADWAY DESIGN DIVISION, SIGNING AND MARKING SECTION, TELEPHONE NO. (615)-741-0982. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ORDERING MATERIAL.

(40) THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.

(41) AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL CONSTRUCTION OFFICE.

(42) THE CONTRACTOR SHALL BE REQUIRED TO FURNISH LAYOUT DRAWINGS (3 SETS) OF ALL EXTRUDED PANEL SIGNS WITH SPACING OF ALL LETTERS, NUMERALS, SHIELDS, AND ARROWS. THE LAYOUT DRAWINGS SHALL BE SENT TO THE ROOADWAY DESIGN DIVISION, SIGNING AND MARKING SECTION, SUITE 1300, J. K. POLK BUILDING, NASHVILLE, TN 37243-1402.

(43) ALL SIGNS MARKED "TO BE REMOVED" ARE TO BE REMOVED BY THE CONTRACTOR AND PAID FOR UNDER ITEM 713-15 AND BECOME THE PROPERTY OF THE CONTRACTOR.

(44) THE EXISTING FOOTINGS ARE TO BE REMOVED 6 INCHES BELOW GROUND LINE.

(45) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUT-OUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND, OR BROWN BACKGROUND.

(46) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.

(47) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS.

TRAFFIC CONTROL DIRECTIONAL SIGNING

(48) ALL EXISTING "EMERGENCY REFERENCE MARKERS" AND "HOSPITAL SIGNS" SHALL BE MAINTAINED WITHIN FULL VIEW OF THE MOTORING PUBLIC THROUGHOUT ALL PHASES OF CONSTRUCTION. ALL WORK IN MOVING AND TEMPORARY SUPPORTS SHALL BE PAID FOR UNDER ITEM NO. 712-06.

SIGNALIZATION

(49) EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNALS SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS, SECTION 730 AND WITH CITY OF CHATTANOOGA'S 730C SPECIAL PROVISION.

(50) ANY SIGNAL HEADS, WHEN VISIBLE TO DRIVERS BUT NOT OPERATIONAL, SHALL BE COMPLETELY COVERED.

(51) SIGNAL HEADS SHALL FLASH A MINIMUM OF SEVEN (7) DAYS PRIOR TO ACTIVATION OF THE SIGNAL.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

(52) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

(53) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.

(54) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.

(55) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

(56) USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

(57) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF A OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE.. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

(58) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

(59) ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED AND THE VERTICAL PANELS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.

LIGHTING

(60) INSTALLATION AND MATERIALS SHALL COMPLY WITH SECTIONS 714 AND 917 OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED MARCH 1, 2006 AND WITH THE LATEST REVISIONS TO THE NATIONAL ELECTRIC CODE, NFPA 70.

(61) ALL WIRING SHALL BE CONCEALED UNDERGROUND IN 2-INCH SCHEDULE 40 PVC RIGID CONDUIT.

(62) THE GROUND WIRE SHALL BE RUN INSIDE CONDUIT WITHIN STRUCTURES, SHALL BE COLORED GREEN AND HAVE THW INSULATION.

(63) EXISTING FOUNDATIONS TO BE REMOVED A MINIMUM OF SIX INCHES BELOW GRADE.

(64) ALL INCIDENTAL EQUIPMENT AND MATERIAL REQUIRED FOR THE SUCCESSFUL EXECUTION OF THIS WORK SHALL BE FURNISHED IN 714 ITEMS WHETHER SPECIFICALLY NOTED OR NOT.

(65) LIGHT STANDARDS SHALL BE ROUND TAPERED POLES. LENGTH SHALL BE DETERMINED BY REQUIRED MOUNTING HEIGHT.

(66) STANDARDS SHALL BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORT FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS.

(67) STANDARDS SHALL BE DESIGNED FOR 80-MPH WIND PRESSURE AND SHALL SUPPORT A 62-POUND LUMINAIRE ON A 15-FOOT ARM.

(68) ALL NEW ROADWAY LIGHT STANDARDS SHALL BE MOUNTED ON BASES WITH ACCESS DOOR. TRANSFORMER BASES SHALL MEET AASHTO SPECIFICATIONS AND HAVE FHWA APPROVAL. STANDARDS SHALL BE ALUMINUM WITH TRANSFORMER BASES.

(69) BRACKET ARMS SHALL BE ROUND TAPERED TRUSS TYPE WITH STRAP MOUNTING AND LENGTHS AS SCHEDULED.

(70) BRACKET ARM UPSWEEP SHALL BE THE SAME FOR ALL LIGHT STANDARDS OF THE SAME TYPE.

EROSION PREVENTION AND SEDIMENT CONTROL

DISTURBED AREA

(71) AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.

(72) PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 15 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS MULCHED, SEEDED WITH MULCH, OR OTHER TEMPORARY COVER IS INSTALLED.

(73) CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.

(74) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS.

(75) CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION.

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GENERAL NOTES

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SEDIMENT CONTROL

(76) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.

(77) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.

(78) WATER PUMPED FROM WORK AREAS AND EXCAVATION MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL- VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. DISCHARGES FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.

(79) CHECK DAMS SHALL BE USED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, BRUSH, GABION, OR SANDBAG CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO REDUCE VELOCITY AND CONTROL EROSION.

(80) FOR AN OUTFALL IN A DRAINAGE AREA OF 10 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROOADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

(81) IF PERMANENT OR TEMPORARY VEGETATION IS TO BE USED AS AN EPSC MEASURE, THEN THE TIMING OF PLANTING OF VEGETATION SHALL BE SHOWN IN THE SWPPP. DELAYING PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.

(82) OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ACCESS (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED, AS NEEDED, TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.

(83) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.

STREAM/WETLAND

(84) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS IN ACCORDANCE WITH TDOT STANDARDS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.

(85) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.

(86) INSTREAM EPSC DEVICES REQUIRE THE ENVIRONMENTAL DIVISION'S PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN TDEC, USACE, AND TVA PERMITS.

(87) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS, SHALL BE ONLY AS SHOWN ON THE PROJECT PLANS AND/OR AS SO SPECIFIED IN THE ARAP/401, SECTION 404 PERMIT(S) AND/OR TVA26(A), IF APPLICABLE. ANY ADDITIONAL PERMITS REQUIRED BY THE CONTRACTOR'S METHOD OF OPERATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AFTER RECEIVING THE APPROVAL OF TDOT ENVIRONMENTAL DIVISION.

(88) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING.

(89) STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CROSSINGS MUST BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES MUST BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK MUST BE USED AT THE CROSSING POINT AND CULVERTED TO PREVENT THE IMPOUNDMENT OF WATER FLOW. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS MUST BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO THEIR PREEXISTING ELEVATION. ALL TEMPORARY CROSSINGS MUST BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK OR THE APPROPRIATE USE OF BARGES AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.

(90) HEAVY EQUIPMENT WORKING IN WETLANDS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT MUST BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED.

(91) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS PROVIDED FOR IN THE PLANS.

SPECIES

(92) NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA. THE SWPPP SHALL BE MODIFIED TO INCLUDE EPSC MEASURES TO PREVENT NEGATIVE IMPACTS TO LEGALLY PROTECTED STATE OR FEDERAL FAUNA OR FLORA OR AS INDICATED IN THE ECOLOGICAL STUDIES OR ON THE PERMIT(S).

INSPECTION, MAINTENANCE, REPAIR

(93) EPSC CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES.

(94) INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES/STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.

(95) SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND BE TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL, C.Y.

(96) THE CONTRACTOR SHALL INSTALL A RAIN GAUGE EVERY LINEAR MILE AT ALL SITES WHERE CLEARING, GRUBBING, EXCAVATION, GRADING CUTTING OR FILLING IS BEING ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED. IF THE PROJECT LENGTH IS LESS THAN ONE LINEAR MILE, ONE RAIN GAUGE SHALL BE INSTALLED AT THE CENTER OF THE PROJECT OR AS INDICATED BY THE TDOT EPSC INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT EACH GAUGE IS MAINTAINED IN GOOD WORKING CONDITION. TDOT AND/OR THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION AND FORECASTED PERCENTAGE OF PRECIPITATION IN DETAILED RECORDS OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL PER GAUGE, THE ESTIMATED DURATION (OR STARTING AND ENDING TIMES), AND FORECASTED PERCENTAGE OF PRECIPITATION FOR THE PROJECT. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGES IS TO BE INCLUDED IN THE UNIT BID PRICES FOR OTHER ITEMS. RAIN GAUGES SHALL BE AS SPECIFIED IN THE APPROVED TDOT RAINFALL MONITORING PLAN.

(97) INSPECTION OF EPSC MEASURES SHALL BE DONE AT LEAST TWICE PER CALENDAR WEEK AT LEAST 72 HOURS APART. A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE/QUALITY CONTROL SITE ASSESSMENT OF EPSC SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION'S COMPREHENSIVE INSPECTION OFFICE GUIDELINES.

(98) OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO SURROUNDING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.

(99) UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE TIMEFRAME, WRITTEN DOCUMENTATION MUST BE PROVIDED IN THE FIELD BOOK AND AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.

(100) THE TDOT PROJECT SUPERVISOR (OR THEIR DESIGNEE) AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT PROJECT SUPERVISOR OR THEIR DESIGNEE WILL COMPLETE THE INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

MATERIALS

(101) WASTE AND BORROW AREAS SHALL BE LOCATED IN NON-WETLAND AREAS AND ABOVE THE 100-YEAR, FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODPLAIN. BORROW AND WASTE DISPOSAL AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY AN ARAP, 404, OR NPDES PERMIT, OBTAINED SOLELY BY THE CONTRACTOR.

SWPPP, PERMITS, PLANS, RECORDS

(102) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS.

(103) ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT ENGINEER. THE ENVIRONMENTAL DIVISION, ROOADWAY DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.

(104) THE FOLLOWING INFORMATION SHALL BE MAINTAINED ON OR NEAR THE SITE: DATES THAT MAJOR GRADING ACTIVITIES OCCUR, DATES WHERE CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, DATES WHEN STABILIZATION MEASURES ARE INITIATED, EPSC INSPECTION RECORDS, QUALITY ASSURANCE SITE ASSESSMENT RECORDS, PRECIPITATION RECORDS, SWPPP, PROJECT ENVIRONMENTAL PERMITS, AND A COPY OF THE PROJECT EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION.

(105) ALL WATER QUALITY AND STORM WATER PERMITS, INCLUDING A COPY OF THE NOC WITH NPDES PERMIT TRACKING NUMBER AND THE LOCATION OF THE SWPPP, SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL CONTACT PERSON WITH A BREIF DESCRIPTION OF THE PROJECT SHALL ALSO BE POSTED. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.

(106) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS OR MODIFICATIONS OF THE SWPPP ARE NEEDED. THE ROOADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

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(107) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY. THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED WHEN MAJOR DESIGN REVISIONS ARE REQUESTED BY CONSTRUCTION. THE ENVIRONMENTAL DIVISION MAY BE CONTACTED FOR GUIDANCE ON SPECIFIC SWPPP NEEDS. A COPY OF ANY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.

(108) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER A CHANGE IN CHEMICAL TREATMENT METHODS IS MADE INCLUDING USE OF A DIFFERENT CHEMICAL, DIFFERENT DOSAGE OR APPLICATION RATE, OR A DIFFERENT AREA OF APPLICATION.

(109) IF A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION) THE SWPPP SHALL BE MODIFIED OR UPDATED.

(110) PROJECT INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF EPSC PLANS SHALL SUCCESSFULLY COMPLETE THE TDEC "LEVEL 1 - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY REFRESHER COURSES AS REQUIRED TO MAINTAIN CERTIFICATION. A COPY OF CERTIFICATION RECORDS FOR THE COURSES SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

LITTER, DEBRIS, WASTE, PETROLEUM

(111) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.

(112) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

SPECIAL NOTES

GRADING

(113) THE GRADING TABULATIONS AND RESULTING EARTHWORK ASSOCIATED BID QUANTITIES WERE PREPARED UTILIZING AVAILABLE GEOTECHNICAL INFORMATION AND/OR REPORTS PREPARED FOR THIS PROJECT. THIS INFORMATION IS PROVIDED FOR GENERAL INFORMATION AND ESTIMATION GUIDANCE ONLY.

(114) BORING DEPICTIONS SHOWN ON THE FOUNDATION DATA SHEETS, SOILS SHEETS, PLANS, AND CROSS-SECTIONS INDICATE SOIL AND ROCK CONDITIONS AT THE SPECIFIC BORING LOCATIONS. ANY SOIL PROFILE AND/OR ROCK LINE IS INTERPRETIVE BASED ON THE JUDGMENT OF THE GEOTECHNICAL ENGINEER/GEOLOGIST. THE TRANSITION BETWEEN BORINGS AND LAYERS MAY VARY SIGNIFICANTLY DEPENDING ON THE GEOLOGIC FORMATIONS ENCOUNTERED.

(115) TO ASSIST IN BID PREPARATION FOR EARTHWORK AND FOUNDATION CONSTRUCTION, DETAIL ROCK AND SOIL DESCRIPTION AND ON SOME PROJECTS, ROCK CORE SAMPLES ARE AVAILABLE FOR INSPECTION AT THE MATERIALS AND TESTS HEADQUARTERS AT 6601 CENTENNIAL BOULEVARD, NASHVILLE, TN OR AT THE TDOT REGION 1 BUILDING IN KNOXVILLE, TN.

(116) THE CONTRACTOR SHALL UTILIZE ALL INFORMATION PROVIDED IN THE PLANS, CROSS-SECTIONS AND CONTRACT DOCUMENTS INCLUDING ANY SPECIAL PROVISIONS AS WELL AS UTILIZING HIS PAST EXPERIENCE WITH PROJECTS OF SIMILAR NATURE, SCOPE AND LOCATION IN PREPARATION OF HIS BID FOR EARTHWORK ITEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND PROVIDE EQUIPMENT AND MEANS NECESSARY TO CONDUCT THE EXCAVATION ACTIVITIES IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.

(117) EARTHWORK IS PAID FOR UNDER ITEM 203-10, EMBANKMENT (COMPACTED IN PLACE). NO ADDITIONAL PAYMENT WILL BE MADE FOR EARTHWORK QUANTITIES BASED SOLELY ON A CLAIM THAT THE QUANTITIES SHOWN IN THE GRADING TABULATION OR ELSEWHERE IN THE PLANS ARE INACCURATE WITH RESPECT TO THE TYPE OF MATERIALS ENCOUNTERED DURING CONSTRUCTION EXCEPT AS PROVIDED FOR BY SECTION 104.02 IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR AS AMENDED IN SUPPLEMENTAL SPECIFICATIONS.

PAVEMENT

RESURFACING

(118) TRAFFIC WILL BE ALLOWED TO TEMPORARILY DRIVE ON THE MILLED SURFACE OF THE ROADWAY UNDER THE FOLLOWING CONDITIONS ONLY:

A. THE MILLED SURFACE IS FINE TEXTURED. THE FINE TEXTURE SHALL BE OBTAINED BY A MILLING MACHINE UTILIZING A MILLING HEAD WITH TEETH SPACING 3/8" OR LESS OPERATING AT LESS THAN 80 FEET PER MINUTE.

B. THE SURFACE SHALL BE SWEPT AND CLEANED OF ALL LOOSE MATERIALS.

C. THE DIFFERENCE IN ELEVATION BETWEEN THE MILLED SURFACE AND THE ADJACENT LANE SHALL NOT EXCEED 1 1/2 INCHES.

D. THE MILLED SURFACE SHALL BE PAVED WITHIN 48 HOURS.

E. RAIN OR INCLEMENT WEATHER IS NOT EXPECTED OR FORECASTED WITHIN 48 HOURS AFTER MILLING.

F. ALL APPLICABLE SIGNING IS INSTALLED IN ACCORDANCE WITH THE MUTCD SIGNING SHALL INCLUDE MOTORCYCLE WARNING SIGNS (TN-64) PLACED IN ADVANCE OF ANY MILLED AREAS.

G. IF RAVELING OR DETERIORATION OF THE MILLED SURFACE IS OCCURRING WHILE TRAFFIC IS DRIVING ON THE MILLED SURFACE, THEN THIS PRACTICE WILL NOT BE ALLOWED AND PAVING SHALL BE COMPLETED IMMEDIATELY AFTER MILLING.

H. ONLY ONE LANE IN EACH DIRECTION SHALL HAVE A MILLED SURFACE AT ONE TIME.

(119) S.R. 153 SHALL BE RESURFACED BETWEEN THE LIMITS OF THE LANE SHIFTS USED FOR TRAFFIC CONTROL.

SIGNALIZATION

(120) THE DESIGN OF TRAFFIC SIGNAL SUPPORT POLES, MAST ARMS, STRAIN POLES, ETC. SHALL BE IN CONFORMANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, CURRENT EDITION. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIGUE CATEGORY 1.

(121) ALL CIRCULAR AND ARROW INDICATIONS WITHIN ALL VEHICULAR SIGNAL HEADS PROPOSED FOR THIS PROJECT SHALL CONSIST OF AN LED (LIGHT EMITTING DIODE) SIGNAL MODULE UNLESS OTHERWISE NOTED IN THE PLANS.

(122) CIRCULAR INDICATIONS SHALL MEET "ITE VTCSH-LED CIRCULAR SIGNAL SUPPLEMENT" FOR EXPANDED/EXTENDED VIEW.

(123) ARROW INDICATIONS SHALL MEET "ITE VTCSH-3 LED ARROW SPECIFICATION" FOR EXPANDED/EXTENDED VIEW.

(124) INCANDESCENT OR SCREW-IN MODULES ARE NOT ACCEPTABLE.

(125) COMPATIBILITY WITH CONFLICT MONITORS AND LOAD SWITCHES SHALL BE TESTED AND CONFIRMED.

(126) DETECTION ZONE LOCATIONS SHALL BE IN ACCORDANCE WITH SECTION 730 OF THE STANDARD SPECIFICATIONS.

(127) SIGNAL HEADS SHALL INCLUDE LOUVERED BACKPLATES WITH A 1" MINIMUM YELLOW RETRO REFLECTIVE BORDER AROUND THE PERIMETER OF THE FACE OF THE BACKPLATE. THE RETRO REFLECTIVE BORDER TO BE MADE OF A TYPE III PRISMATIC OR BETTER MATERIAL.

(128) MANUFACTURER SHALL PROVIDE A MINIMUM FIVE-YEAR WARRANTY FOR OPERATION OF THE UNIT.

(129) ALL SIGNAL HEADS WITH LED LENSES SHALL INCLUDE SWIVEL BALANCE ADJUSTERS TO MAINTAIN THE PROPER VISIBILITY. COSTS OF ADJUSTERS TO BE INCLUDED IN COSTS OF SIGNAL HEADS (FOR TEMPORARY SIGNALS).

(130) ALL PEDESTRIAN TRAFFIC CONTROL INDICATIONS, WHERE CALLED FOR, SHALL CONSIST OF LED MODULES DISPLAYING "WALKING PERSON" AND "HAND" SYMBOLS, ALONG WITH A PEDESTRIAN INTERVAL COUNTDOWN DISPLAY, WITHIN THE SAME FACE UNLESS OTHERWISE NOTED IN THE PLANS.

(131) CONTACT THE CITY OF CHATTANOOGA'S TRAFFIC ENGINEERING DEPARTMENT, (423) 643-5950, FOR POLE, CABINET, AND SIGNAL HEAD LOCATIONS BEFORE INSTALLING.

(132) REFER TO 730C SPECIFICATIONS FOR CABINET, CONTROLLER, AND OTHER SIGNAL EQUIPMENT SPECIFICATIONS.

(133) CABINET, CONTROLLER, AND OTHER EQUIPMENT IN CABINET SHALL BE BROUGHT TO THE CITY OF CHATTANOOGA TRAFFIC OPERATIONS TO BE TESTED 7 DAYS BEFORE INSTALLATION.

EROSION PREVENTION AND SEDIMENT CONTROL

NPDES

(134) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEET 13, FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION ON THE TOTAL AREA OF EXPOSED SOIL.

FEDERAL AVAIATION ADMINISTRATION

CONSTRUCTION OR ALTERATION REQUIRING NOTICE

(135) IF REQUESTED BY THE FAA, OR IF YOU PROPOSE ANY OF THE FOLLOWING TYPES OF CONSTRUCTION OR ALTERATION, YOU MUST FILE NOTICE WITH THE FAA OF:

A. ANY CONSTRUCTION OR ALTERATION THAT EXCEEDS AN IMAGINARY SURFACE EXTENDING OUTWARD AND UPWARD AT ANY OF THE FOLLOWING SLOPES:

(1) 100 TO 1 FOR A HORIZONTAL DISTANCE OF 20,000 FT FROM THE NEAREST POINT OF THE NEAREST RUNWAY OF EACH AIRPORT DESCRIBED IN PARAGRAPH (B) OF THIS SECTION WITH ITS LONGEST RUNWAY MORE THAN 3,200 FT IN ACTUAL LENGTH, EXCLUDING HELIPORTS.

B. ANY CONSTRUCTION OR ALTERATION ON ANY OF THE FOLLOWING AIRPORTS AND HELIPORTS:

(1) A PUBLIC USE AIRPORT LISTED IN THE AIRPORT/FACILITY DIRECTORY, ALASKA SUPPLEMENT, OR PACIFIC CHART SUPPLEMENT OF THE U.S. GOVERNMENT FLIGHT INFORMAITON PUBLICATIONS.

(2) AN AIRPORT OR HELIPORT WITH AT LEAST ONE FAA APPROVED INSTRUMENT APPROACH PROCEDURE.

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GENERAL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	PHSIP-3602(5)	2N

PROPOSED GUARDRAIL

SHEET NO.	LOCATION	SIDE		STATION OR OFFSETT		GUARDRAIL					REMARKS
						BRIDGE ENDS 705-01.01 (L.F.)	SINGLE TYPE 2 705-02.02 (L.F.)	TYPE 13 705-04.03 (EACH)	TYPE 21 705-04.04 (EACH)	TYPE 38 705-04.07 (EACH)	
		LT	RT	FROM	TO						
4A	L.R. 03602	X		100+11.43	106+09.84		630.71	1			
4A	L.R. 03602		X	105+24.54	105+74.54					1	
4A	L.R. 03602		X	107+09.80	107+36.37		25.32				
4A	L.R. 03602		X	107+36.37	107+63.27	26.9					
4A	L.R. 03602	X		107+22.07	107+36.37		14.83				
4A	L.R. 03602	X		107+36.37	107+63.27	26.9					
4A	L.R. 03602	X		109+52.27	109+79.17	26.9					
4A	L.R. 03602	X		107+79.17	109+95.82		16.75				
4A	L.R. 03602		X	109+52.27	109+79.17	26.9					
4A	L.R. 03602		X	109+79.17	109+99.71		20.41				
4A-5A	L.R. 03602	X		110+99.04	113+18.75		201.20		1		
4A	RAMP A		X	303+28.47	307+04.50		402.71			1	
4A	RAMP A	X		304+28.54	306+74.70		229.96			1	
4A	RAMP B		X	400+06.88	402+31.64		234.38	1			
4A	RAMP B	X		400+43.38	402+31.61		194.32	1			
4A	RAMP C		X	500+30.70	502+00.85		192.29	1			
4A	RAMP C	X		500+52.34	502+00.85		156.01	1			
4A	RAMP D	X		605+01.79	607+44.67		215.12			1	
4A	L.R. 03602	X		19.45'	45.49'		26.04				STA. 108+08.76
4A	L.R. 03602		X	34.63'	134.62'		89.6	1			STA. 108+09.32
4A	L.R. 03602	X		19.45'	45.49'		26.04				STA. 109+06.92
4A	L.R. 03602		X	21.08'	47.12'		26.04				STA. 109+07.97
TOTALS						**108**	**2702**	**6**	**1**	**4**	

CATCH BASINS

SHEET NO.	LOCATION	STATION	OFFSET (FT.)	DRAINAGE CODE	GRATE/TOP ELEV.	STRUCTURE TYPE	INSIDE DIMENSIONS	DEPTH (FT.)	STANDARD DRAWING	PAY ITEMS			
										JB TYPE 1 611-02.10	TYPE 12 611-12.02 4' - 8'	TYPE 12 611-12.03 8' - 12'	TYPE 14 611-14.01 0' - 4'
4A	L.R. 03602	101+50.00	34.50' RT	1	668.25	14		3.67	D-CB-14B D-CB-14P				1
4A	L.R. 03602	102+60.00	34.50' RT	3	670.18	12		5.82	D-CB-12B D-CB-12P		1		
4A	L.R. 03602	104+50.00	34.50' RT	5	679.60	12		4.00	D-CB-12B D-CB-12P		1		
4A	L.R. 03602	107+20.00	26.63' RT	6	692.67	12		9.48	D-CB-12B D-CB-12P			1	
4A	L.R. 03602	110+00.00	26.63' RT	10	692.45	12		8.49	D-CB-12B D-CB-12P			1	
5A	L.R. 03602	112+50.00	18.50' RT	13	684.47	12		4.00	D-CB-12B D-CB-12P		1		
5A	L.R. 03602	113+50.00	18.50' LT	15	682.87	12		4.00	D-CB-12B D-CB-12P		1		
5A	L.R. 03602	114+90.00	13.36' LT	16	677.84	#1 JB		3.21	D-JBS-1	1			
5A	L.R. 03602	115+50.00	18.50' LT	17	680.21	12		6.48	D-CB-12B D-CB-12P		1		
TOTALS										**1**	**5**	**2**	**1**

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TABULATED QUANTITIES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	PHSIP-3602(5)	2-0

BRIDGE DRAINS

STATION	LOCATION	SPILLWAY WIDTH	RUBBLE-STONE RIP-RAP 709-01.01 (CU. YD.)	18" PIPE DRAIN (BRIDGE DRAIN) 610-07.03 (L.F.)	REMARKS
107+60.77	L.R. 03602		3	60	LEFT SIDE ONLY
109+54.77	L.R. 03602		3	65	LEFT SIDE ONLY
TOTALS			**6**	**125**	

ESTIMATED GRADING QUANTITIES

STATION TO STATION	ROAD & DRAINAGE EXC. (UNCL.) C.Y.	BORROW EXCAVATION UNCL. - C.Y.	BORROW EXCAVATION S. ROCK - C.Y.	CHANNEL EXC. C.Y.	EXCESS EXC. WASTE C.Y.	EMB. C.Y.
100+00.00 TO 116+09.57	3978	15336				13940
TOTALS	**3978** (1)(2)(3)(4)(5)	**15336**	**0**	**0**	**0**	**13940** (6)(7)

(1) INCLUDES 1,611 CY FROM RAMPS AND SIDEROADS
(2) INCLUDES 131 CY FOR TEMPORARY PAVING
(3) INCLUDES 370 CY FOR BRIDGE EXCAVATION
(4) INCLUDES 45 CY FOR EROSION CONTROL
(5) TO BE PAID FOR UNDER ITEM NO. 203-10
(6) INCLUDES 7,136 CY FOR RAMPS AND SIDEROADS
(7) INCLUDES 846 CY FOR TEMPORARY PAVING

CROSS DRAIN ENDWALLS

LOCATION	CROSS DRAIN STATION	OFFSET (FT.)	STRUCTURE TYPE	STANDARD DRAWING	SKEW	RIP-RAP 709-05.06 (TON)	CLASS A CONC. 611-07.01 (C.Y.)	REINF. STEEL 611-07.02 (LB.)	36 IN. ENDWALL 3:1 611-07.63 (EA.)	36 IN. ENDWALL 4:1 611-07.64 (EA.)	36 IN. ENDWALL 6:1 611-07.65 (EA.)
L.R. 03602	109+20.50	59.04' LT	U	D-PE-36(A) DPPE-36(B)	90°						1
L.R. 03602	109+20.50	63.99' RT	U	D-PE-36(A) DPPE-36(B)	90°					1	
RAMP D	605+07.31	46.52' LT	U	D-PE-36(A) DPPE-36(B)	90°				1		
TOTALS						**0**	**0**	**0**	**1**	**1**	**1**

PAVEMENT QUANTITIES

LOCATION	PAY ITEMS 303-01 (TON)	307-01.01 (TON)	307-01.08 (TON)	313-03 (TON)	402-01 (TON)	402-02 (TON)	403-01 (TON)	411-01.07 (TON)	411-01.10 (TON)	411-02.10 (TON)	415-01.01 (TON)	501-01.03 (SY)
L.R. 03602	4013	1980	1625	-	13	51	4	244	1377	-	236	-
S.R. 153	-	-	-	-	-	-	8	371	-	869	1239	-
RAMPS	2701	-	-	3130	-	-	-	-	-	-	-	3071
SIDEROADS	414	337	288	-	1	5	0.5	4	49	-	-	-
TEMP. PAVING	466	119	125	-	2	7	0.5	-	-	-	-	-
TOTALS	**7595**	**2435**	**2038**	**3130**	**16**	**63**	**13**	**620**	**1427**	**869**	**1475**	**3071**

CROSS DRAIN TABULATION

STATION	RCP CLASS III (L.F.) FILL HEIGHT < OR = 16 FT. 18"	24"	30"	36"	48"	SKEW	RIP-RAP 709-05.06 (TON)	END TREATMENT INLET TYPE	INLET DRAWING NO.	OUTLET TYPE	OUTLET DRAWING NO.	REMARKS
109+20.50				14		90°		U	D-PE-36(A) DPPE-36(B)	U	D-PE-36(A) DPPE-36(B)	L.R. 03602
605+07.31				10		90°		N/A	N/A	U	D-PE-36(A) DPPE-36(B)	RAMP D
TOTALS	**0**	**0**	**0**	**24**	**0**		**0**					

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	PHSIP-3602(5)	2P

SPECIAL DITCHES

ROAD	STATION		SLOPE			DETAIL NO.	TYPE
	FROM	TO	FORE (H/V)	BOTTOM WIDTH (FT.)	BACK (H/V)		
L.R. 03602	101+00.00	102+60.00	3:1	4	3:1	RD01-S-11A	TRAP.
L.R. 03602	103+50.00	102+60.00	3:1	4	3:1	RD01-S-11A	TRAP.
MEHARRY	10+48.56	11+07.96	3:1	4	3:1	RD01-S-11A	TRAP.
RAMP D	605+08.39	605+17.90	1:1	3	1:1	RD01-S-11A	TRAP.

STORM DRAINAGE PIPES

SHEET NO.	FROM		TO		% GRADE	REINFORCED CONC. PIPE - CLASS III SIZE & LENGTH (L.F.)			RIP-RAP 709-05.06 (TON)
	CODE	OUTLET ELEV.	CODE	INLET ELEV.		18"	24"	23" x 14"	
4A	1	664.58	2	664.53	0.30			13	
4A	4	664.42	3	664.36	0.30		13		
4A	5	675.60	4	664.86	5.90	182			
4A	6	683.19	7	682.80	1.00	39			
4A	10	683.96	11	683.60	1.00	36			
4A	19	688.67	6	688.52	0.50	30			
4A	20	688.46	10	688.29	0.50	35			
5A	13	680.47	14	680.38	0.50	19			
5A	15	678.87	16	675.30	3.03	118			
5A	16	674.63	17	673.83	1.48	54			
5A	17	673.73	18	672.54	0.79	150			
TOTALS						**663**	**13**	**13**	**0**

STORM DRAINAGE ENDWALLS

SHEET NO.	LOCATION	STATION	OFFSET (FT.)	DRAINAGE CODE	STRUCTURE TYPE	STANDARD DRAWING	CLASS A CONC. 611-07.01 (C.Y.)	REINF. STEEL 611-07.02 (LB.)	STRUC. STEEL 611-07.03 (LB.)
4A	L.R. 03602	101+50.00	48.31' RT	2	U	D-PE-5	0.121	57	
4A	L.R. 03602	102+60.00	54.99' RT	4	U	D-PE-3B(1) D-PE-3B(2)	1.52	172	
4A	L.R. 03603	107+20.00	66.87' RT	7	U	D-PE-3B(1) D-PE-3B(2)	1.05	132	
4A	L.R. 03606	110+00.00	63.66' RT	11	U	D-PE-3B(1) D-PE-3B(2)	1.05	132	
5A	L.R. 03607	112+50.00	38.55' RT	14	U	D-PE-3B(1) D-PE-3B(2)	1.05	132	
TOTALS							**5**	**625**	**0**

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TABULATED QUANTITIES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	3
2015	2015	PHSIP-3602(5)	3

R.O.W. ACQUISITION TABLE

TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA ACRES			AREA TO BE ACQUIRED ACRES			AREA REMAINING ACRES		EASEMENT (SQUARE FEET)			
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT REFERENCE BK.	DEED DOCUMENT REFERENCE PAGE	LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM. DRAINAGE	SLOPE	CONST.	
1	METROPOLITAN TABERNACLE INC	148B-B	022	6677	783	7.050		7.050				7.050				193	1 2
~~2~~	~~HIGHLAND CEMETARY COMPANY~~	~~148C-A~~	~~002~~	~~463~~	~~620~~		~~86.500~~	~~86.500~~					~~86.500~~				
3	DAYTON BOULEVARD MOTORS, INC.	148B-C	009	3633	503	1.280		1.280				1.280				961	3
~~4~~	~~SHALLOWFORD PROPERTY HOLDINGS, LLC.~~	~~138O-B~~	~~001.03~~	~~9424~~	~~994~~	~~31.700~~		~~31.700~~				~~31.700~~					

UTILITIES

(1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.

(2) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.

(3) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

(4) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.

(5) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

RIGHT - OF - WAY NOTES

(1) IT IS INTENDED THAT ALL BUILDINGS AND/OR PORTIONS OF BUILDINGS THAT ARE WITHIN THE PROPOSED RIGHT-OF-WAY AND/OR EASEMENT LINES FOR THE PROJECT BE REMOVED THERE FROM IN THE PROCESS OF RIGHT-OF-WAY ACQUISITION. IF ANY SUCH BUILDINGS OR IMPROVEMENTS ARE NOT REMOVED IN THE COURSE OF RIGHT-OF-WAY ACQUISITION, THE CIVIL ENGINEERING MANAGER 2, DESIGN DIVISION AND THE CIVIL ENGINEERING MANAGER 1, REGIONAL DESIGN OFFICE, ARE TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.

(2) ALL RAMPS MUST CONFORM TO THE DEPARTMENT'S "POLICY ON FINANCING CONSTRUCTION OF PUBLIC ROAD INTERSECTIONS AND DRIVEWAYS ON HIGHWAY RESURFACING, RECONSTRUCTION AND CONSTRUCTION PROJECTS ON NEW LOCATIONS", THE MANUAL ON RULES AND REGULATIONS FOR CONSTRUCTING DRIVEWAYS ON STATE HIGHWAY RIGHT-OF-WAY, STANDARD DRAWING RP-R-1, AND OTHER ACCEPTED DESIGN AND SAFETY STANDARDS.

(3) EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED IN KIND TO A TOUCHDOWN POINT.

(4) WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY EXCEEDS 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED TO A TOUCHDOWN POINT OR UNTIL THE GRADE IS LESS THAN 7 PERCENT.

(5) WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY IS LESS THAN 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED A SHOULDER WIDTH FROM THE EDGE OF PAVEMENT AND THE REMAINDER OF THAT DRIVEWAY REPLACED IN KIND TO A TOUCHDOWN POINT.

(6) ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.

(7) TRACT REMAINDERS NOT HAVING AN EXISTING DRIVEWAY WILL BE PROVIDED ONE 50-FOOT OPENING IN THE ACCESS CONTROL FENCE AND A DRIVEWAY WILL BE CONSTRUCTED UNLESS ACCESS IS PROVIDED FROM AN INTERSECTING ROAD OR BASED ON PHYSICAL CONDITIONS AND/OR CONFLICTS WITH OTHER DESIGN CONSIDERATIONS WHICH PREVENT AN ACCESS OPENING. PAVING OF THESE NEW DRIVEWAYS WILL BE IN ACCORDANCE TO THE 7 PERCENT CRITERIA PREVIOUSLY MENTIONED FOR EXISTING DRIVEWAYS.

(8) NEW DRIVEWAYS PROVIDED IN THE PLANS WILL BE PAVED BASED ON THE 7 PERCENT CRITERIA. THOSE 7 PERCENT OR STEEPER IN GRADE WILL BE PAVED AND THOSE FLATTER THAN 7 PERCENT WILL BE COVERED WITH BASE STONE.

(9) ON PROJECTS WITH CURB AND GUTTER THAT ARE ON STATE ROUTES, IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT. AFTER THE PERMIT HAS BEEN GRANTED, THE DEPARTMENT WILL CONSTRUCT THE DRIVEWAY OR FIELD ENTRANCE THROUGH THE CURB AND SIDEWALK, PROVIDED THE CURB AND SIDEWALK HAVE NOT BEEN CONSTRUCTED. IT WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER TO CONSTRUCT THE DRIVEWAY OR FIELD ENTRANCE FROM BACK OF SIDEWALK TO TOUCHDOWN POINT FOR ANY ADDITIONAL DRIVEWAYS OR FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS.

(10) ON NON-STATE ROUTES, ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS SHALL REQUIRE A PERMIT ONLY IF THE LOCAL AGENCY SPECIFIES THE NEED FOR THAT PERMIT.

1 THE CONTRACTOR SHALL WORK AROUND AND NOT DISTURB THE EXISTING FIRE SUPRESSION SYSTEM.

2 CONSTRUCTION EASEMENT FOR ACCESS AND WORKING ROOM DURING CONSTRUCTION.

3 CONSTRUCTION EASEMENT FOR ACCESS AND WORKING ROOM DURING CONSTRUCTION.

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY ACQUISITION TABLE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	3A
CONST.	2015	PHSIP-3602(5)	3A

UTILITY OWNERS

POWER:

ELECTRIC POWER BOARD (EPB)
10 West Martin Luther King Blvd.
Chattanooga, TN 37422
Phone:(423) 648-1372

GAS:

CHATTANOOGA GAS
PO Box 4569
Dept. 6250
Atlanta, GA 30302
Phone:(423) 490-4311
Emergency: (866) 643-4170

SEWER:

HAMILTON COUNTY
Engineering Department
1250 Market Street
Chattanooga, TN 37402
Phone: (423) 209-7842
Emergency: (423) 209-6408

CITY OF CHATTANOOGA
Mr. Gordon Phillips
1250 Market Street, Suite 2100
Chattanooga, TN 37402-2713
Phone: (423) 643-6191

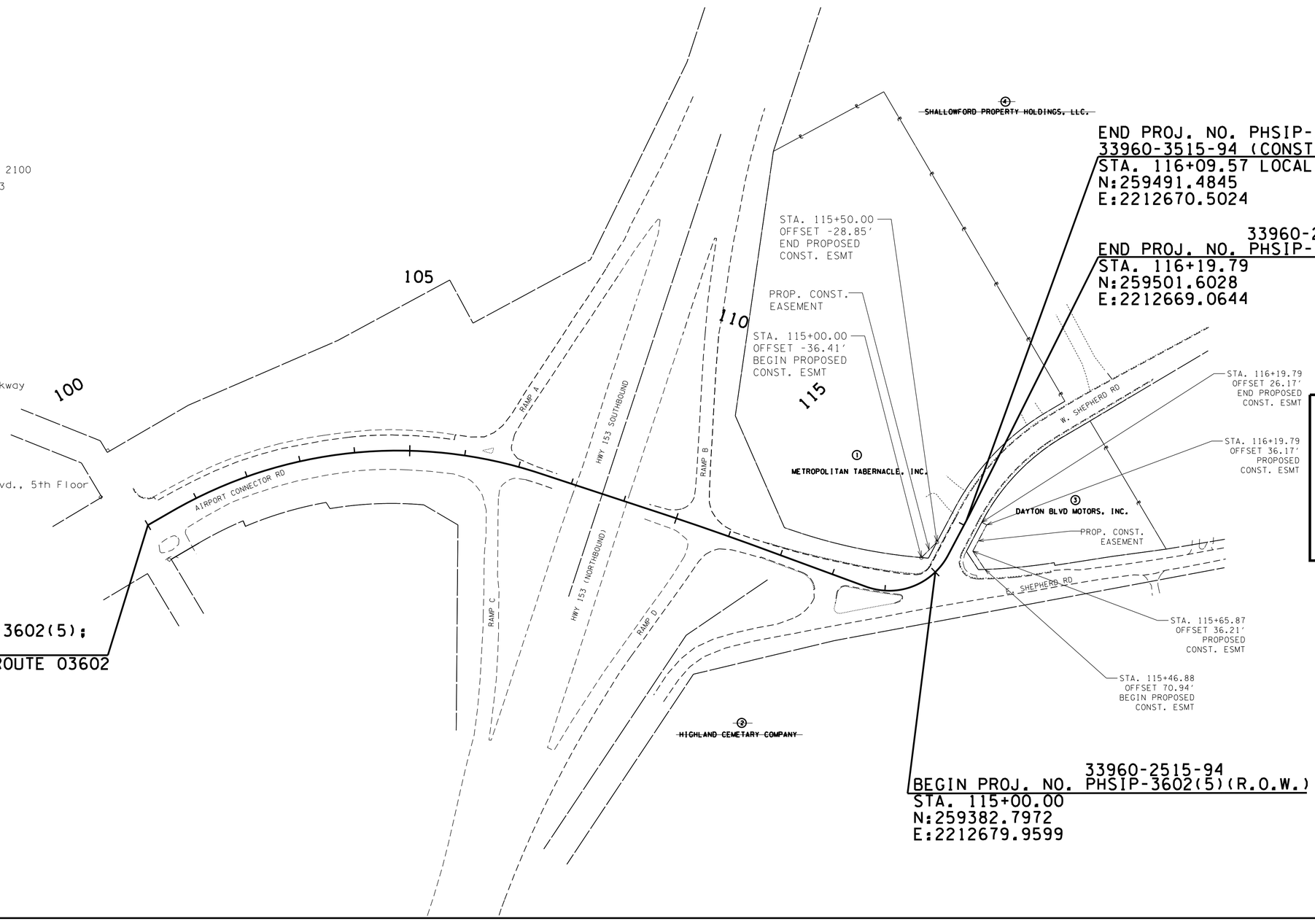
WATER:

TENNESSEE AMERICAN WATER
1101 Broad Street
Chattanooga, TN 37401
Phone: (423) 755-7629

TELEPHONE:

AT&T
Mr. Scott Logeman
360 Gees Mill Business Parkway
Conyers, GA 30013
Phone: (770)335-8255

BELLSOUTH
DBA AT&T Mr. Tim Manley
300 E Martin Luther King Blvd., 5th Floor
Chattanooga, TN 37403
Phone: (423)752-9144



END PROJ. NO. PHSIP-3602(5);
33960-3515-94 (CONST.)
STA. 116+09.57 LOCAL ROUTE 03602
N:259491.4845
E:2212670.5024

33960-2515-94
END PROJ. NO. PHSIP-3602(5) (R.O.W.)
STA. 116+19.79
N:259501.6028
E:2212669.0644

BEGIN PROJ. NO. PHSIP-3602(5);
33960-3515-94 (CONST.)
STA. 100+00.00 LOCAL ROUTE 03602
N:258612.9986
E:2211477.5203

33960-2515-94
BEGIN PROJ. NO. PHSIP-3602(5)(R.O.W.)
STA. 115+00.00
N:259382.7972
E:2212679.9599

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP

B.O.P. TO E.O.P.

SCALE: 1"=100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	4
CONST.	2015	PHSIP-3602(5)	4

CURVE MAINLINE-1
PI 104+16.88
N 258,993.9722
E 2,211,646.7831
Δ 48° 14′ 22″ (RT)
D 7° 00′ 00″
R 818.51
L 689.13
T 366.48
SE MATCH EXISTING

CURVE MAINLINE-2
PI 110+68.40
N 259,206.5961
E 2,212,308.8101
Δ 1° 55′ 19″ (RT)
D 1° 00′ 00″
R 5,730.00
L 192.21
T 96.12
SE NC
DESIGN SPEED 30 MPH

CURVE RAMPA-1
PI 301+57.40
N 259,643.4404
E 2,211,873.7744
Δ 10° 34′ 47″ (RT)
D 3° 22′ 13″
R 1,700.00
L 313.91
T 157.40

CURVE RAMPB-1
PI 405+21.15
N 259,641.0042
E 2,212,013.6365
Δ 11° 46′ 56″ (RT)
D 3° 05′ 49″
R 1,850.00
L 380.43
T 190.89

CURVE RAMPC-1
PI 505+43.81
N 258,629.6730
E 2,212,223.6568
Δ 18° 23′ 30″ (RT)
D 3° 00′ 56″
R 1,900.00
L 609.89
T 307.59

CURVE RAMPD-1
PI 602+45.79
N 258,646.9142
E 2,212,321.4805
Δ 16° 56′ 44″ (RT)
D 3° 28′ 21″
R 1,650.00
L 487.99
T 245.79

LEGEND	WETLAND IMPACTS
	AREA OF PERMANENT IMPACT = 0.0164 AC.
	VOLUME OF PERMANENT IMPACT = 26.5 C.Y.
	AREA OF TEMPORARY IMPACT = 0 AC.
	VOLUME OF TEMPORARY IMPACT = 0 C.Y.

BEGIN PROJ. NO. PHSIP-3602(5);
33960-3515-94 (CONST.)
STA. 100+00.00 LOCAL ROUTE 03602
N:258612.9986
E:2211477.5203

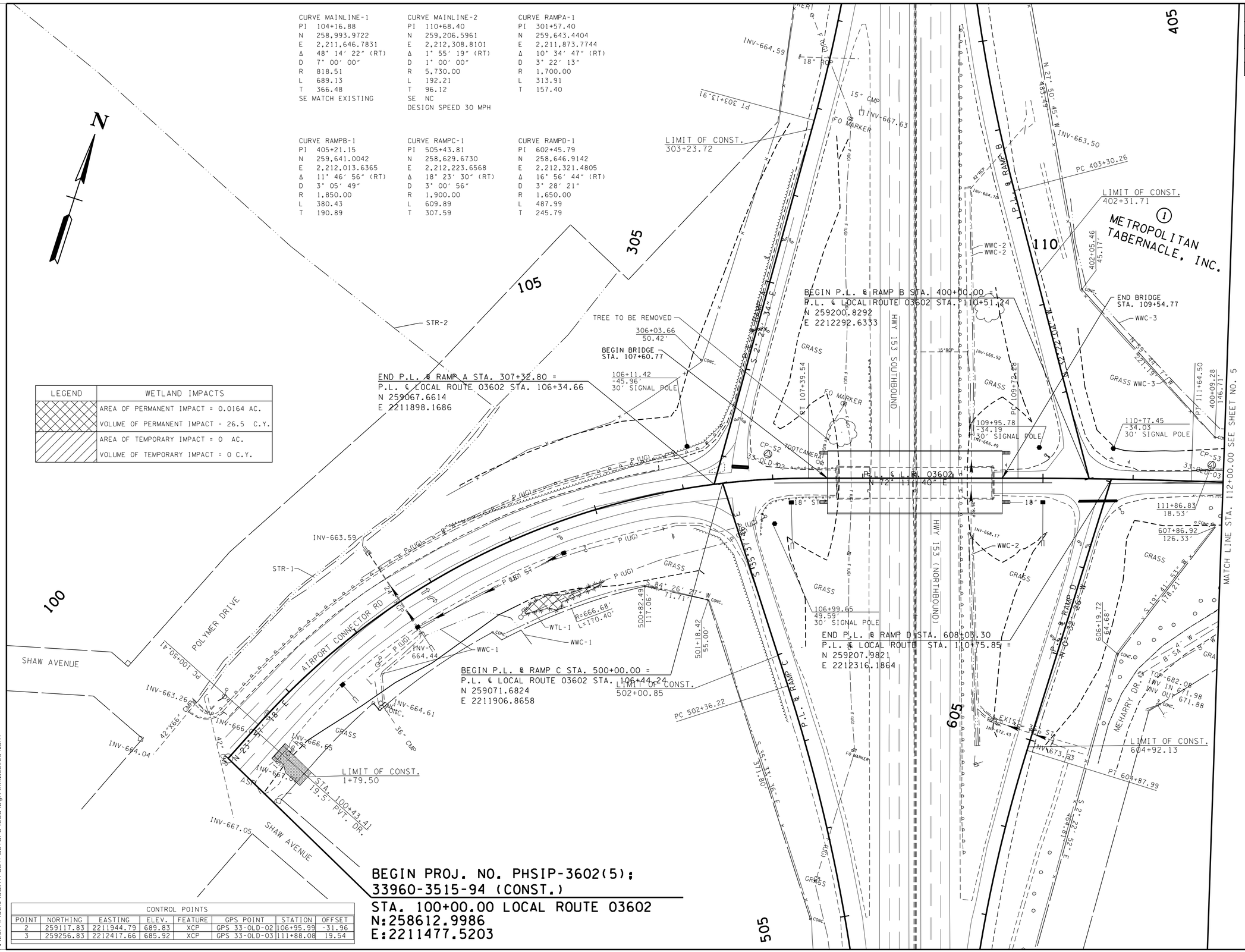
END P.L. & RAMP A STA. 307+32.80 =
P.L. & LOCAL ROUTE 03602 STA. 106+34.66
N 259067.6614
E 2211898.1686

BEGIN P.L. & RAMP B STA. 400+00.00 =
P.L. & LOCAL ROUTE 03602 STA. 110+51.24
N 259200.8292
E 2212292.6333

BEGIN P.L. & RAMP C STA. 500+00.00 =
P.L. & LOCAL ROUTE 03602 STA. 106+44.24
N 259071.6824
E 2211906.8658

END P.L. & RAMP D STA. 608+03.30
P.L. & LOCAL ROUTE STA. 110+75.85 =
N 259207.9821
E 2212316.1864

CONTROL POINTS							
POINT	NORTHING	EASTING	ELEV.	FEATURE	GPS POINT	STATION	OFFSET
2	259117.83	2211944.79	689.83	XCP	GPS 33-OLD-02	106+95.99	-31.96
3	259256.83	2212417.66	685.92	XCP	GPS 33-OLD-03	111+88.08	19.54



UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

B.O.P. TO STA.112+00

SCALE: 1"=50′

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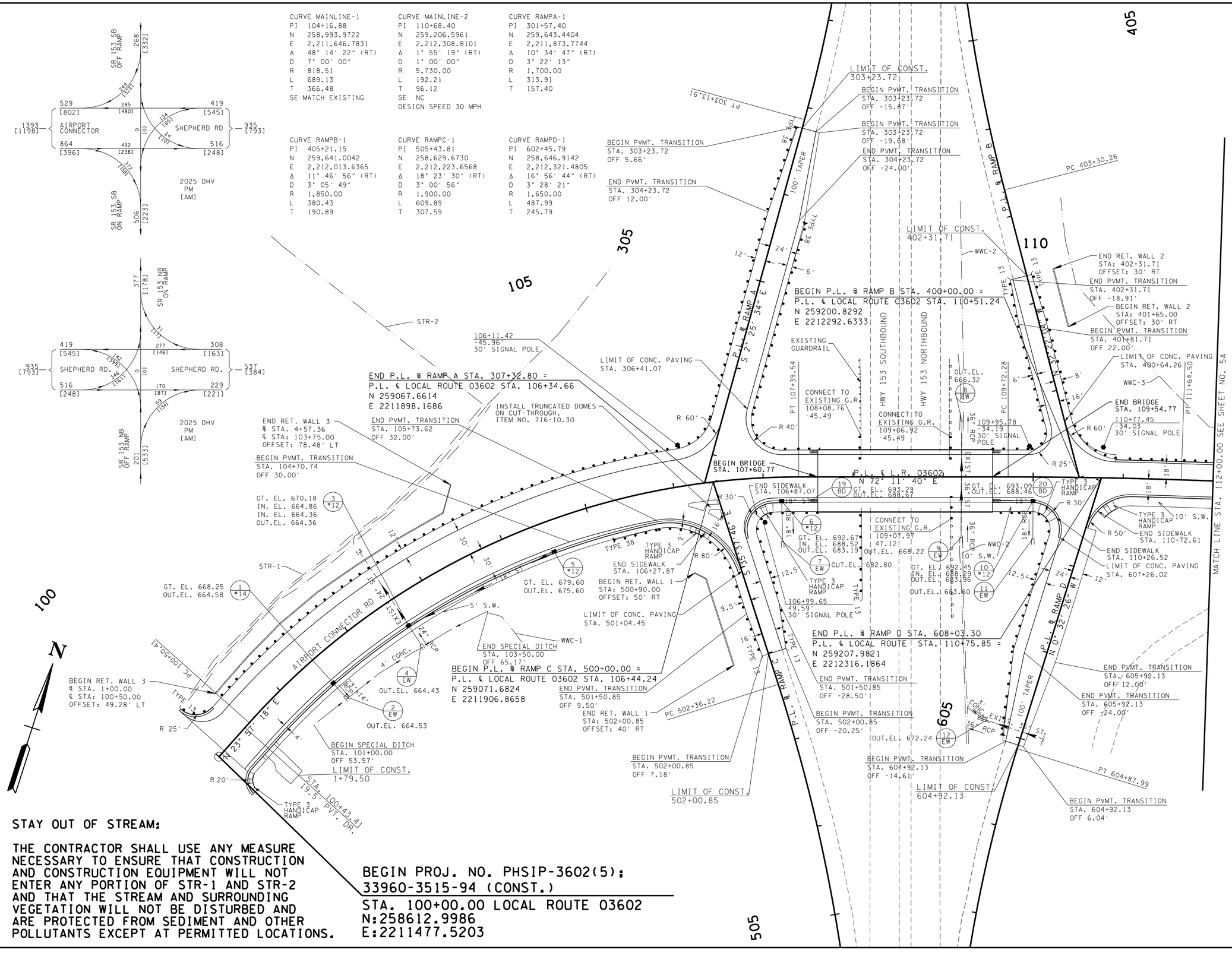
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	4A
CONST.	2015	PHSIP-3602(5)	4A



STAY OUT OF STREAM:

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION AND CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF STR-1 AND STR-2 AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT PERMITTED LOCATIONS.

BEGIN PROJ. NO. PHSIP-3602(5);
33960-3515-94 (CONST.)

STA. 100+00.00 LOCAL ROUTE 03602
N:258612.9986
E:2211477.5203

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

B.O.P. TO STA.112+00

SCALE: 1"=50'

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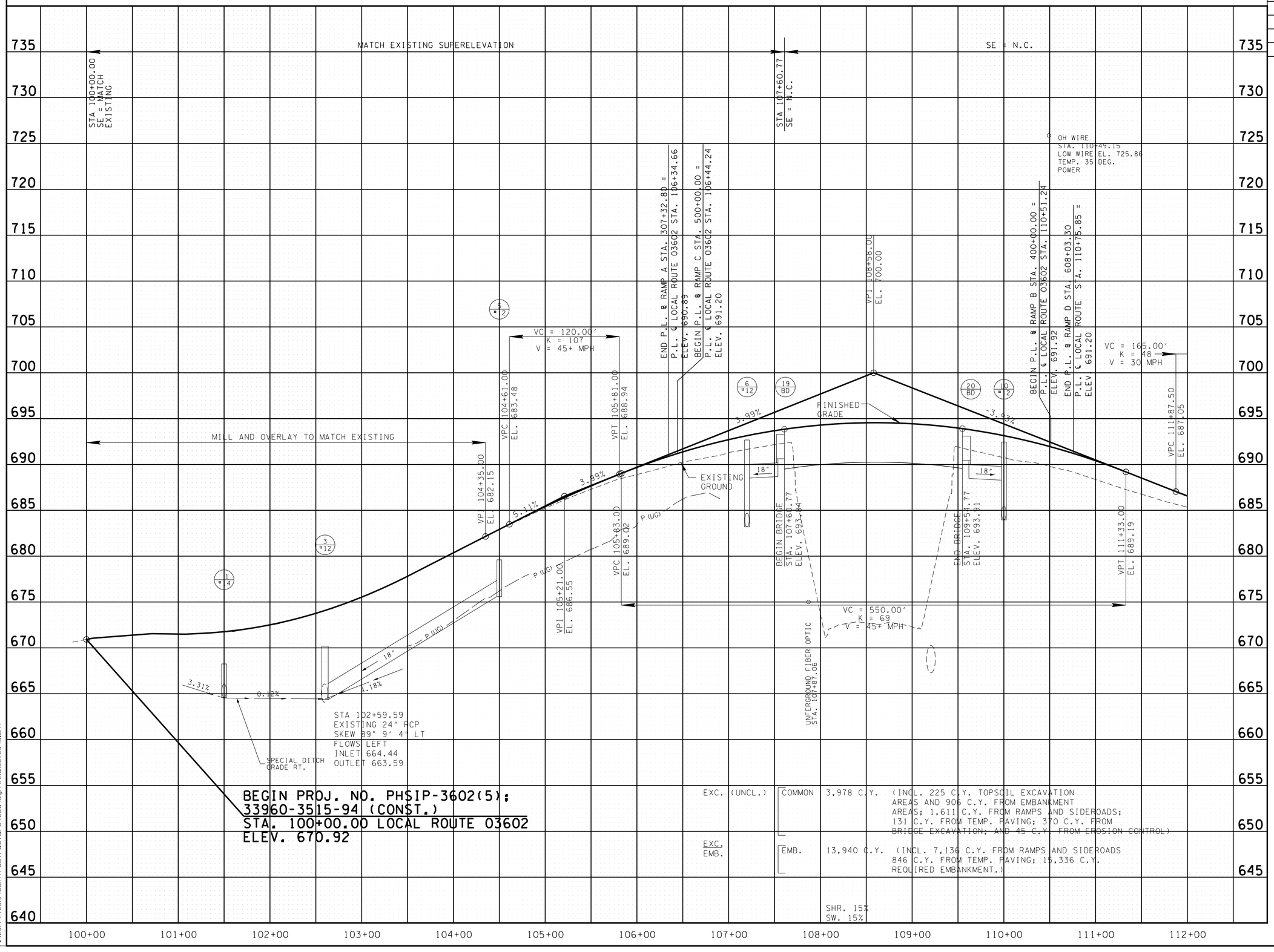
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	4B
CONST.	2015	PHSIP-3602(5)	4B



EXC. (UNCL.)	COMMON	3,978 C.Y.	(INCL. 225 C.Y. TOPSOIL EXCAVATION AREAS AND 906 C.Y. FROM EMBANKMENT AREAS; 1,611 C.Y. FROM RAMPS AND SIDEROADS; 131 C.Y. FROM TEMP. PAVING; 370 C.Y. FROM BRIDGE EXCAVATION; AND 45 C.Y. FROM EROSION CONTROL)	
EXC. EMB.	EMB.	13,940 C.Y.	(INCL. 7,136 C.Y. FROM RAMPS AND SIDEROADS 846 C.Y. FROM TEMP. PAVING; 15,336 C.Y. REQUIRED EMBANKMENT.)	
		SHR. 15% SW. 15%		

UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE

B.O.P. TO STA.112+00
SCALE: 1"=50' HORIZ.
1"=5' VERT.

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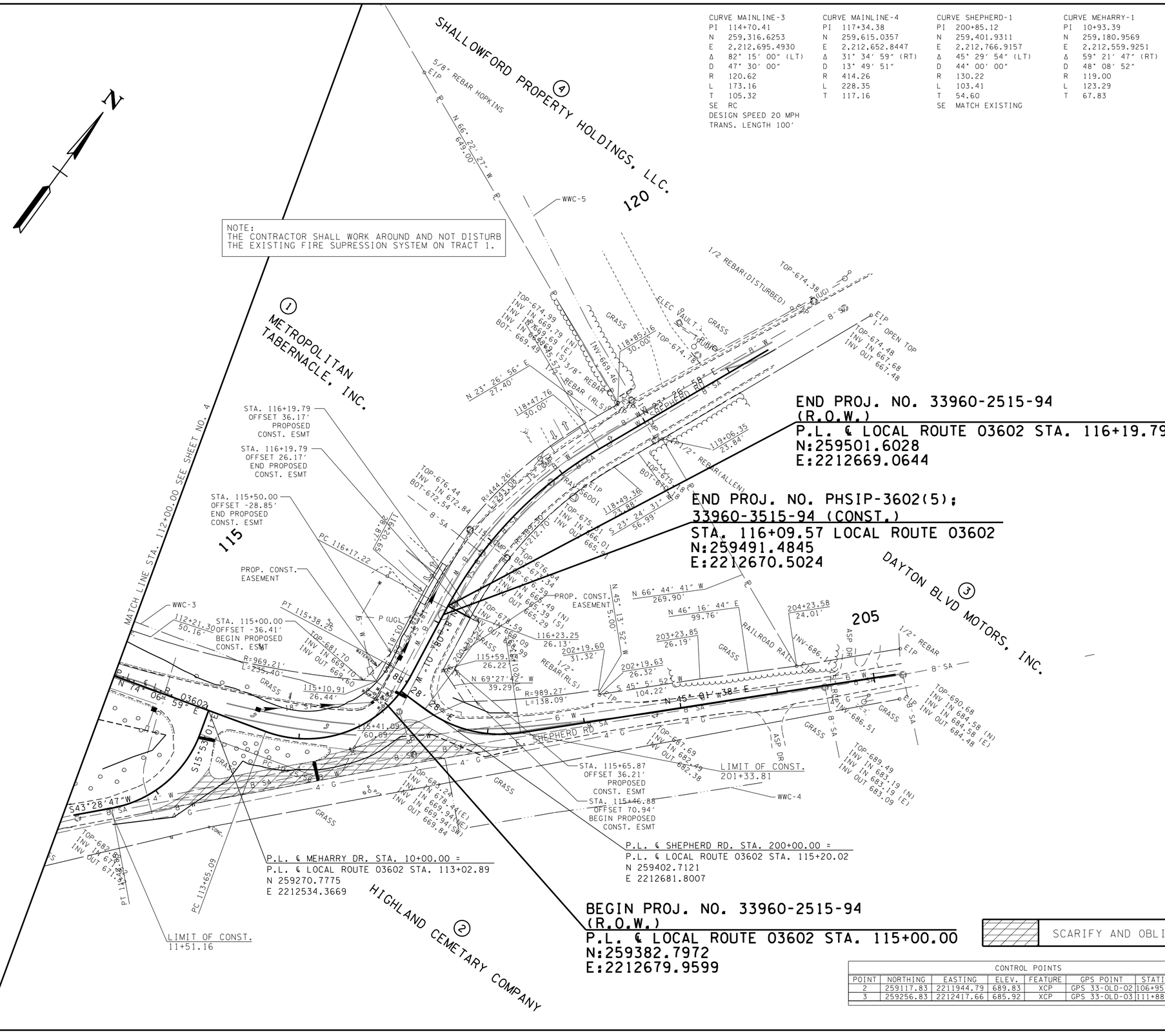
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	5
CONST.	2015	PHSIP-3602(5)	5

CURVE MAINLINE-3
PI 114+70.41
N 259,316.6253
E 2,212,695.4930
Δ 82° 15′ 00″ (LT)
D 47° 30′ 00″
R 120.62
L 173.16
T 105.32
SE RC
DESIGN SPEED 20 MPH
TRANS. LENGTH 100′

CURVE MAINLINE-4
PI 117+34.38
N 259,615.0357
E 2,212,652.8447
Δ 31° 34′ 59″ (RT)
D 13° 49′ 51″
R 414.26
L 228.35
T 117.16

CURVE SHEPHERD-1
PI 200+85.12
N 259,401.9311
E 2,212,766.9157
Δ 45° 29′ 54″ (LT)
D 44° 00′ 00″
R 130.22
L 103.41
T 54.60
SE MATCH EXISTING

CURVE MEHARRY-1
PI 10+93.39
N 259,180.9569
E 2,212,559.9251
Δ 59° 21′ 47″ (RT)
D 48° 08′ 52″
R 119.00
L 123.29
T 67.83



CONTROL POINTS

POINT	NORTHING	EASTING	ELEV.	FEATURE	GPS POINT	STATION	OFFSET
2	259117.83	2211944.79	689.83	XCP	GPS 33-OLD-02	106+95.99	-31.96
3	259256.83	2212417.66	685.92	XCP	GPS 33-OLD-03	111+88.08	19.54

UNOFFICIAL SET

NOT FOR BIDDING

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.112+00 TO E.O.P.

SCALE: 1"=50′

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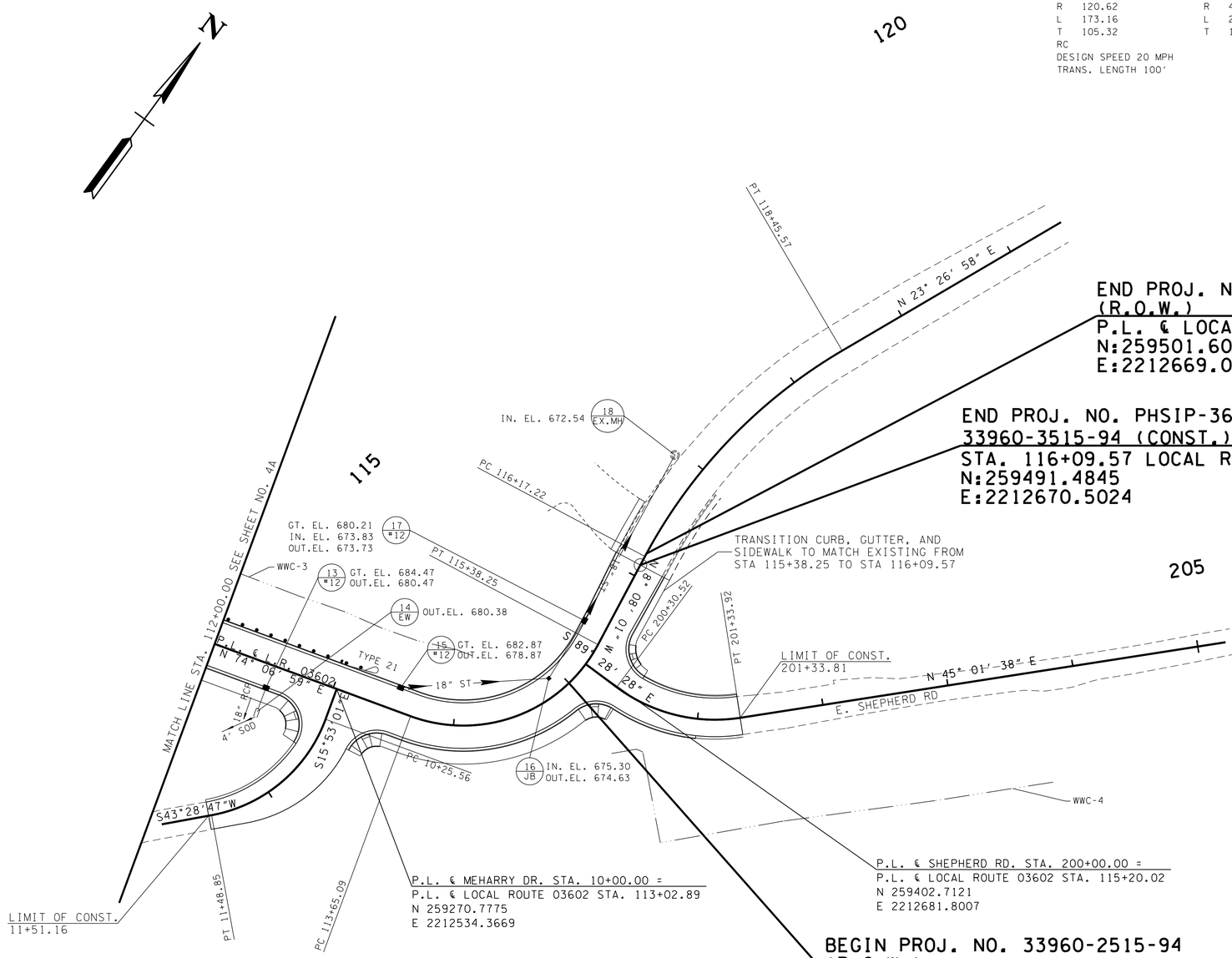
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	5A
CONST.	2015	PHSIP-3602(5)	5A

CURVE MAINLINE-3
PI 114+70.41
N 259,316.6253
E 2,212,695.4930
Δ 82° 15′ 00″ (LT)
D 47° 30′ 00″
R 120.62
L 173.16
T 105.32
RC
DESIGN SPEED 20 MPH
TRANS. LENGTH 100′

CURVE MAINLINE-4
PI 117+34.38
N 259,615.0357
E 2,212,652.8447
Δ 31° 34′ 59″ (RT)
D 13° 49′ 51″
R 414.26
L 228.35
T 117.16

CURVE SHEPHERD-1
PI 200+85.12
N 259,401.9311
E 2,212,766.9157
Δ 45° 29′ 54″ (LT)
D 44° 00′ 00″
R 130.22
L 103.41
T 54.60
MATCH EXISTING SE

CURVE MEHARRY-1
PI 10+93.39
N 259,180.9569
E 2,212,559.9251
Δ 59° 21′ 47″ (RT)
D 48° 08′ 52″
R 119.00
L 123.29
T 67.83



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.112+00 TO E.O.P.

SCALE: 1"=50′

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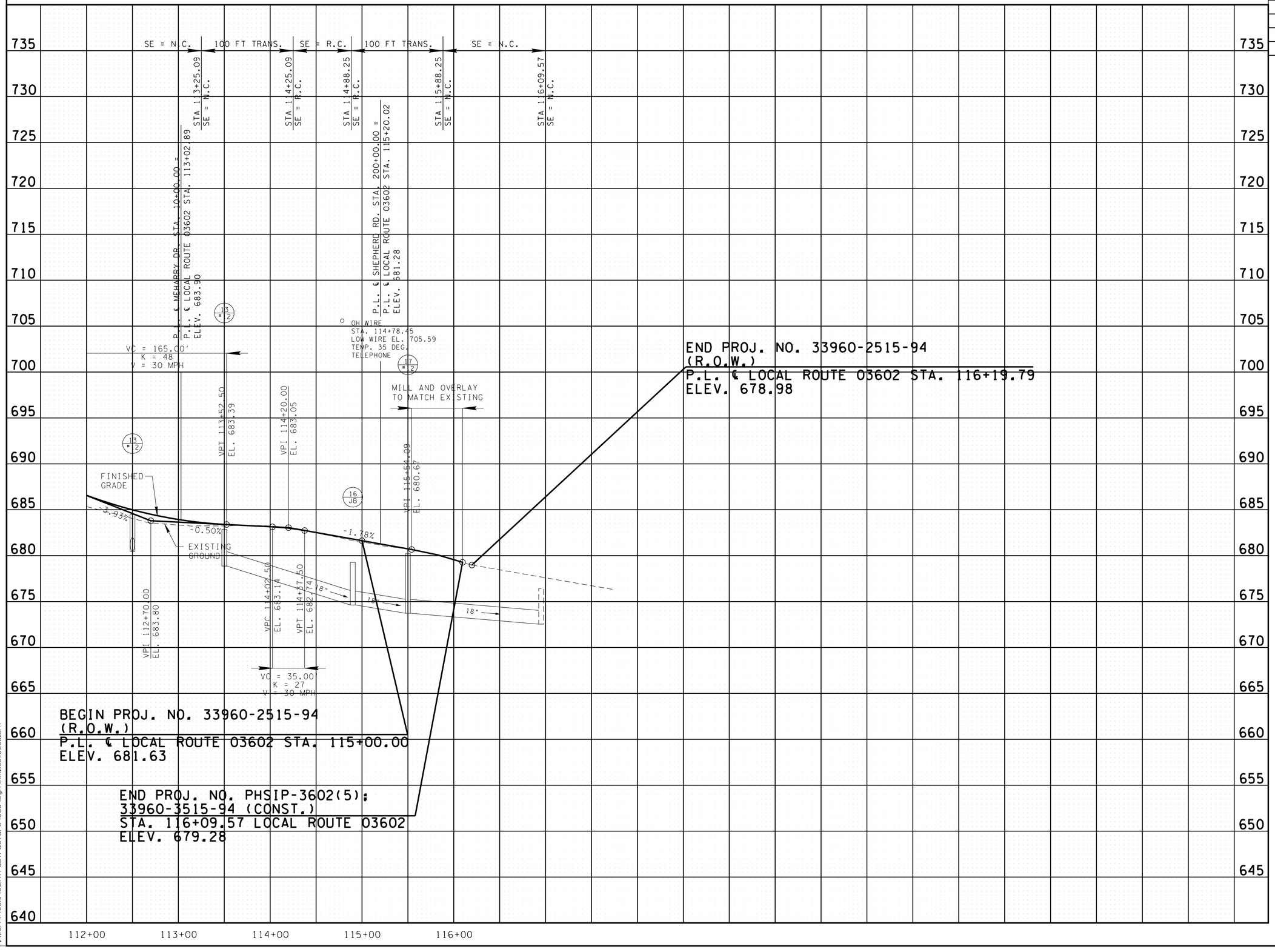
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	5B
CONST.	2015	PHSIP-3602(5)	5B



UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE

STA.112+00 TO E.O.P.

SCALE: 1"=50' HORIZ.
1"=5' VERT.

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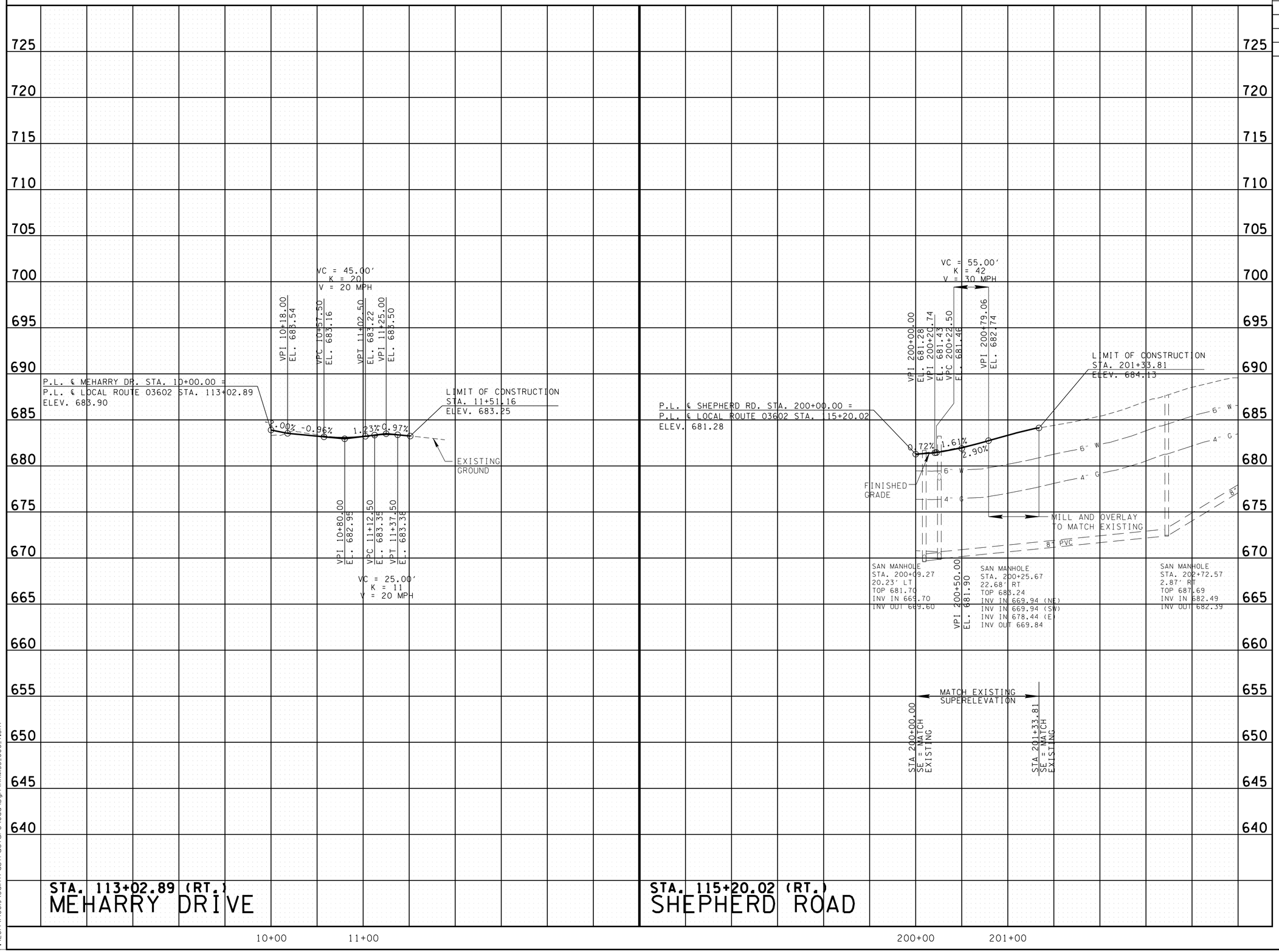
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	6
CONST.	2015	PHSIP-3602(5)	6



UNOFFICIAL SET

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE

SIDE ROADS

SCALE: 1"=50' HORIZ.
1"=5' VERT.

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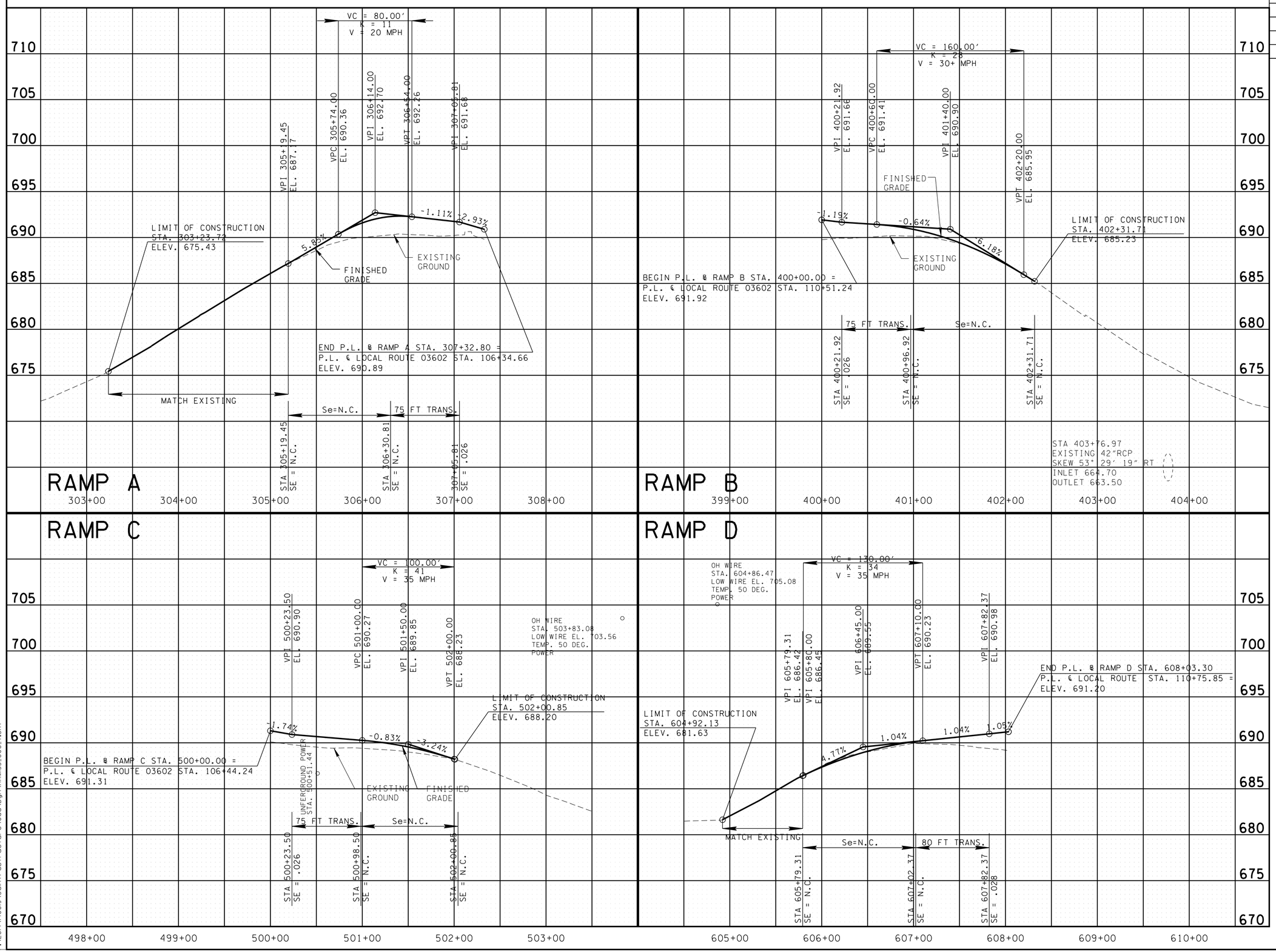
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	7
CONST.	2015	PHSIP-3602(5)	7



UNOFFICIAL SET

NOT FOR BIDDING

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROFILE

RAMPS

SCALE: 1"=50' HORIZ.
1"=5' VERT.

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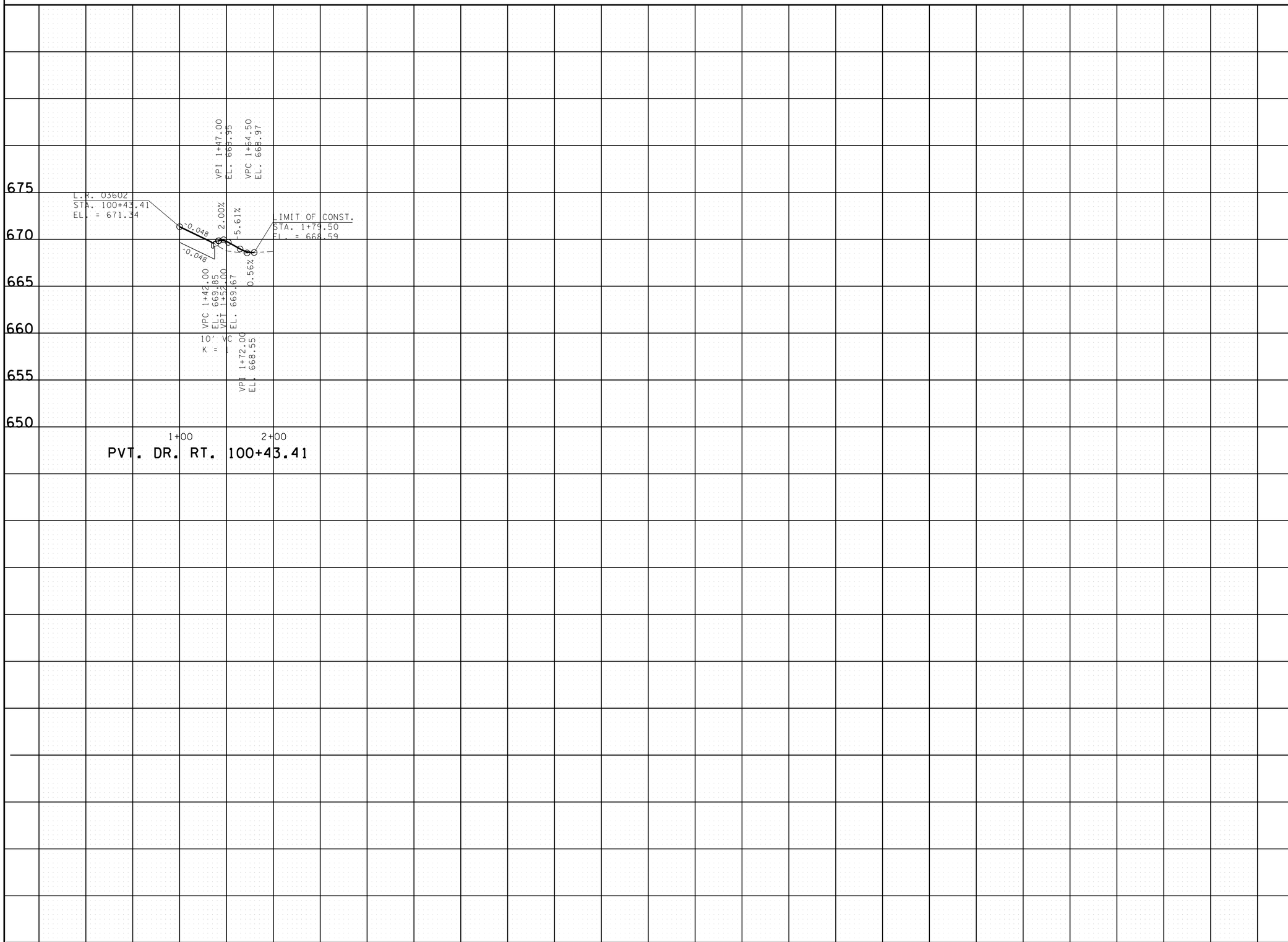
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	8
CONST.	2015	PHSIP-3602(5)	8



UNOFFICIAL SET

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRIVATE DRIVE PROFILE

DRIVEWAYS

SCALE: 1"=50' HORIZ.
1"=5' VERT.

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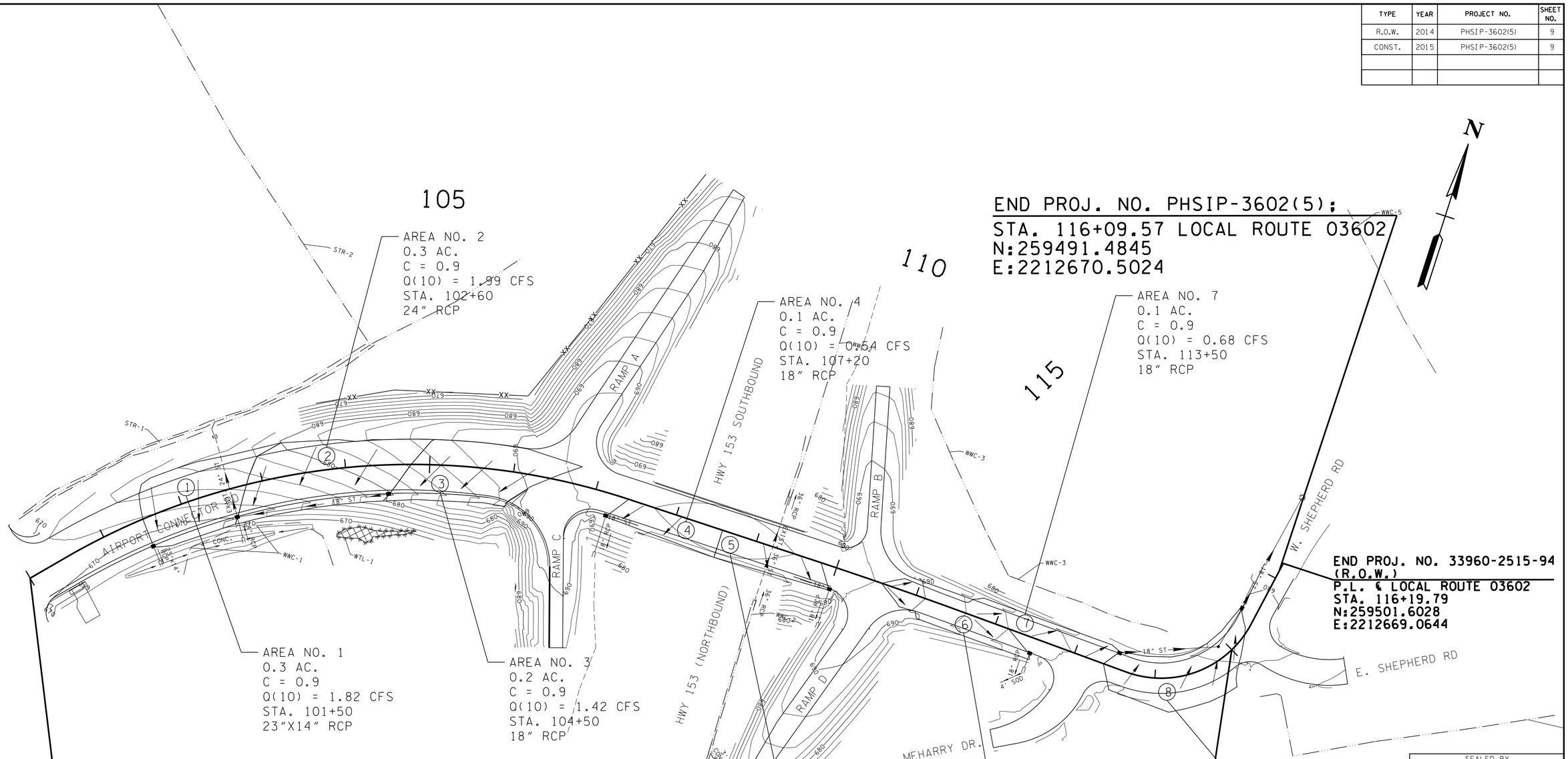
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	9
CONST.	2015	PHSIP-3602(5)	9



SEALED BY

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UNOFFICIAL SET

NOT FOR BIDDING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DRAINAGE MAP

B.O.P. TO E.O.P.

SCALE: 1"=60'

/15/2015 2:14:04 PM
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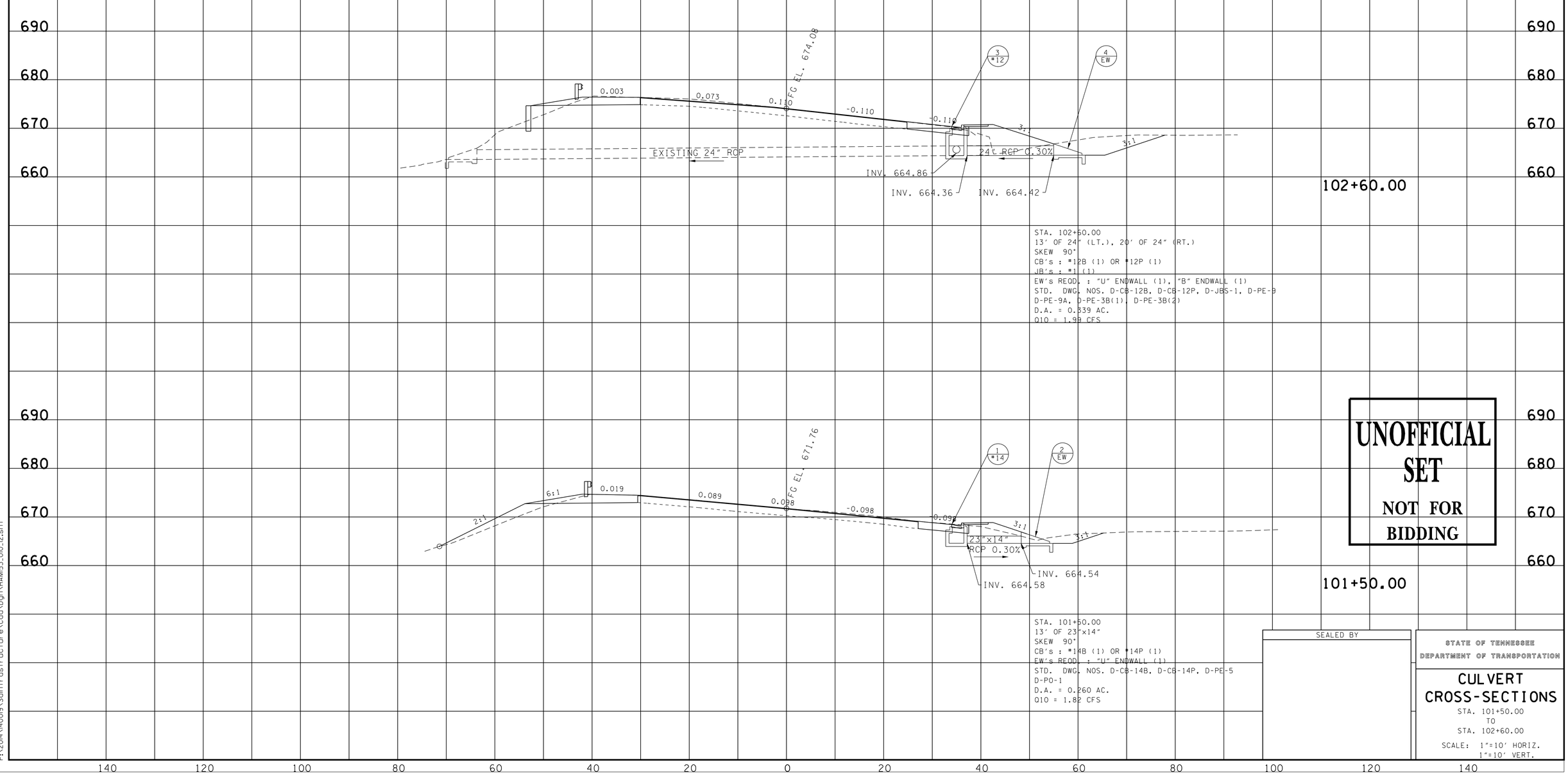
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	10
CONST.	2015	PHSIP-3602(5)	10



UNOFFICIAL SET
NOT FOR BIDDING

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CULVERT CROSS-SECTIONS

STA. 101+50.00
TO
STA. 102+60.00

SCALE: 1"=10' HORIZ.
1"=10' VERT.

1/15/2015 12:59:12 PM
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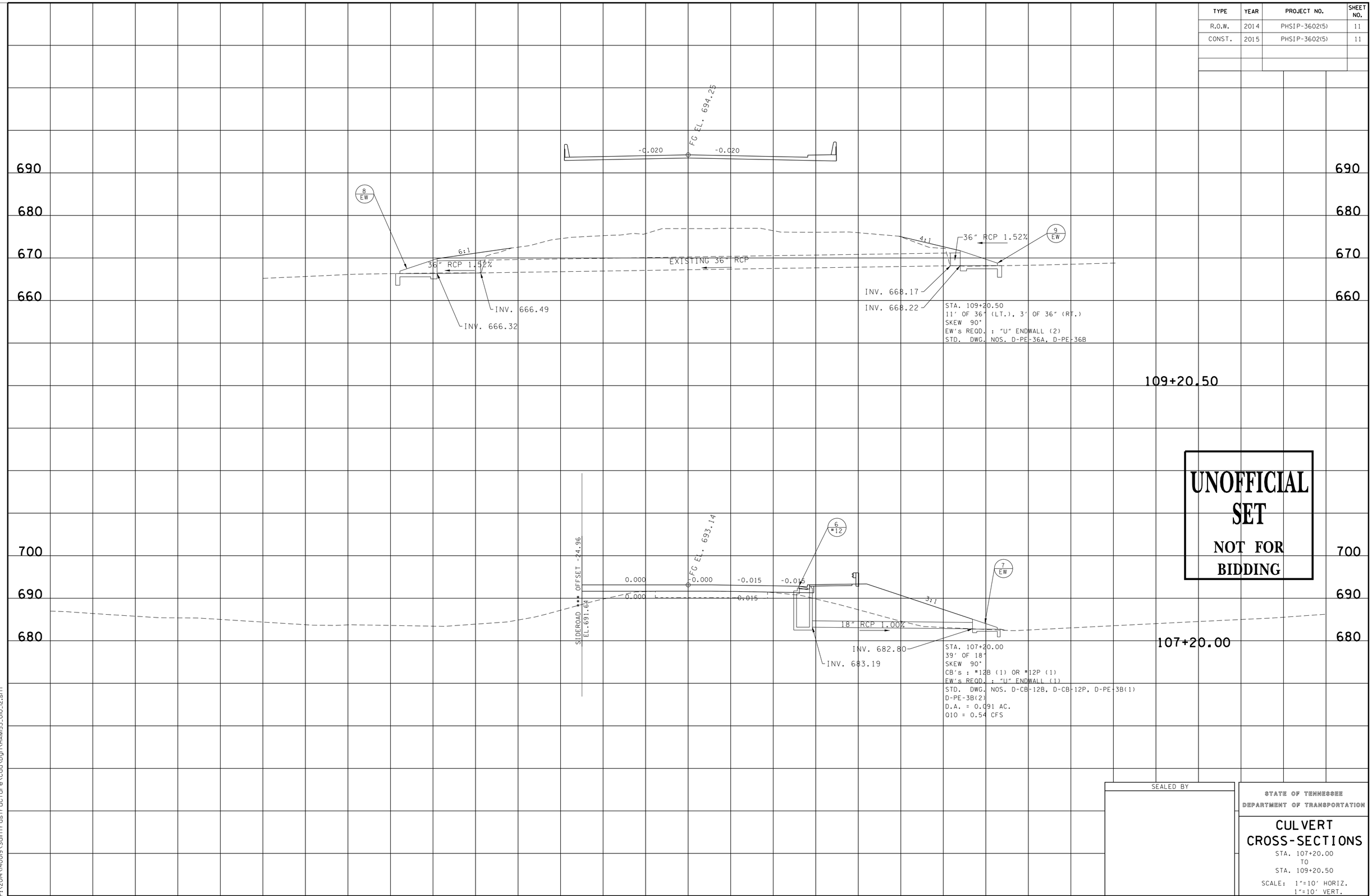
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	11
CONST.	2015	PHSIP-3602(5)	11



UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CULVERT CROSS-SECTIONS

STA. 107+20.00
TO
STA. 109+20.50

SCALE: 1"=10' HORIZ.
1"=10' VERT.

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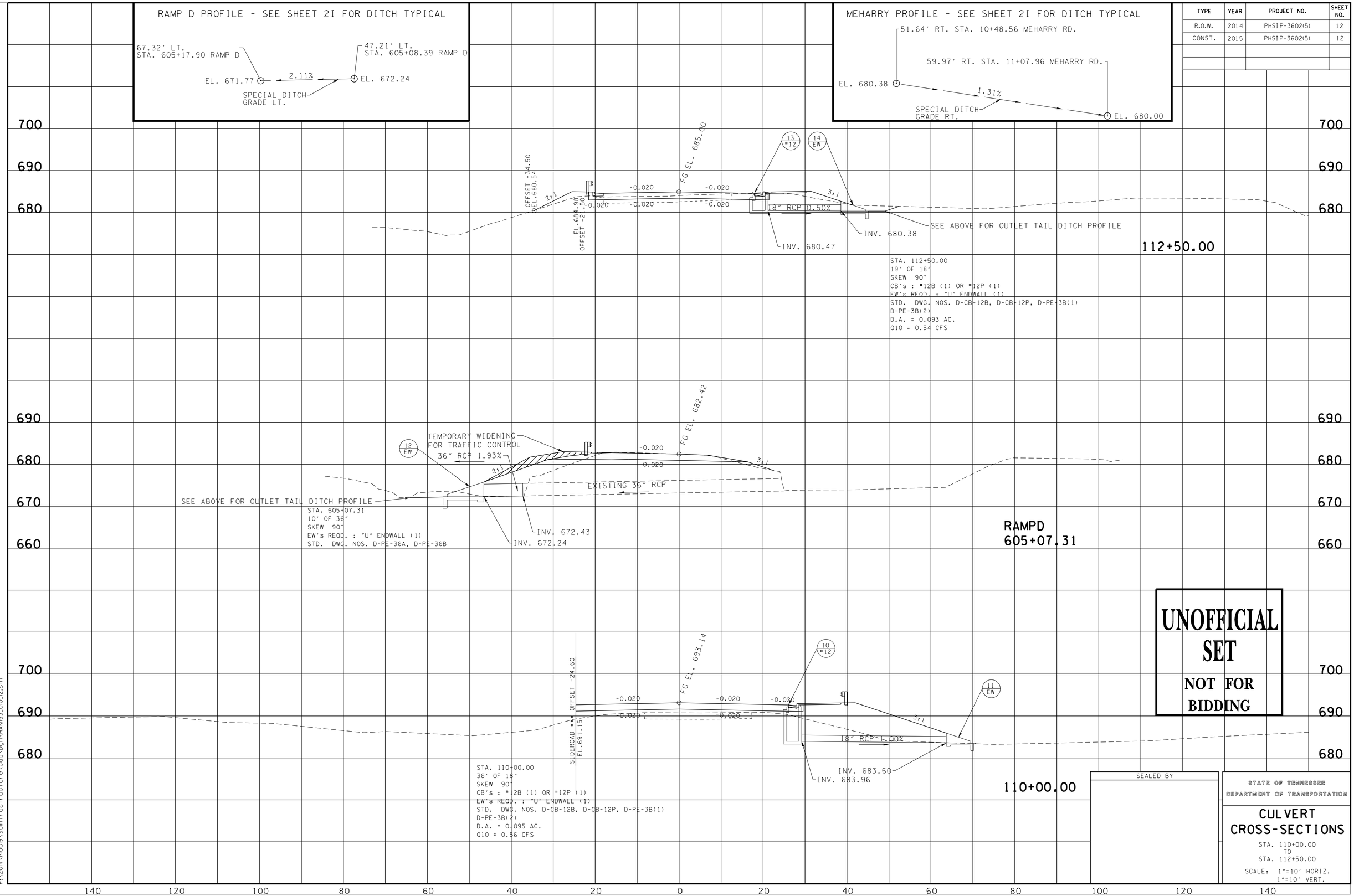
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	12
CONST.	2015	PHSIP-3602(5)	12



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

CULVERT CROSS-SECTIONS

STA. 110+00.00
TO
STA. 112+50.00

SCALE: 1"=10' HORIZ.
1"=10' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	13
CONST.	2015	PHSIP-3602(5)	13

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

STREAM/WETLAND

(1) ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.

(2) A 30 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM SHALL BE PRESERVED, TO THE MAXIMUM EXTENT PRACTICABLE, DURING CONSTRUCTION ACTIVITIES AT THE SITE. BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA. THE 30 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 15 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES. BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

(3) THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCITON AND CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF STR-1 AND STR-2 AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS EXCEPT AT PERMITTED LOCATIONS.

KNOWN EXCEPTIONAL TENNESSEE WATERS

(4) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, AN OUTFALL IN A DRAINAGE AREA OF 5 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/ 24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT.

(5) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, A 60 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM WITH THIS DESIGNATION SHALL BE PRESERVED, TO THE MAXIMUM EXTENT PRACTICABLE, DURING CONSTRUCTION ACTIVITIES AT THE SITE. BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 30 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES. BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

NPDES

(6) NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EPSC DEVICES ON THE EPSC PLAN CONTAINED IN THE APPROVED SWPPP.

(7) THE EPSC MEASURES AND/OR PLAN SHALL BE MODIFIED AS NECESSARY SO THAT THEY ARE EFFECTIVE AT ALL TIMES THROUGHOUT THE COURSE OF THE PROJECT.

(8) THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EPSC MEASURES BE IN PLACE BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES, INCLUDING WITHOUT LIMITATION AS FOLLOWS:

A. INITIAL CLEARING AND GRUBBING SHALL BE LIMITED TO THAT NECESSARY FOR THE INSTALLATION OF APPLICABLE EPSC MEASURES IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

B. NO OTHER CLEARING AND GRUBBING OPERATIONS SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

C. NO CULVERT OR BRIDGE CONSTRUCTION SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

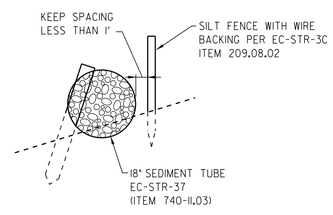
D. NO GRADING, EXCAVATION, CUTTING, FILLING, OR OTHER EARTHWORK SHALL BE STARTED BEFORE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

(9) PERMANENT EPSC MEASURES SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OF ANY SEQUENCE OR PHASE. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR WHEN CONSTRUCTION ACTIVITIES ON A PORTION OF THE SITE ARE TEMPORARILY CEASED AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME UNTIL AFTER 14 CALENDAR DAYS. PERMANENT STABILIZATION WITH PERENNIAL VEGETATION OR OTHER PERMANENTLY STABLE NON-ERODING SURFACE SHALL REPLACE ANY TEMPORARY MEASURES AS SOON AS PRACTICABLE. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER-RUN WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE.

(10) STEEP SLOPES (A NATURAL OR CREATED SLOPE OF 35% GRADE (2.8H:1V) OR GREATER REGARDLESS OF HEIGHT) SHALL BE TEMPORARILY STABILIZED NO LATER THAN 7 CALENDAR DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.

(11) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SUPPORT ACTIVITIES; TDOT PROJECTS ARE COVERED UNDER THE "WASTE AND BORROW" MANUAL PER THE SSWMP.

(12) EXCEPT AS OTHERWISE SPECIFIED, THERE ARE NO KNOWN SPECIAL ENVIRONMENTAL FACTORS PRESENT ON THIS PROJECT THAT INDICATE A NEED FOR SEASONAL LIMITATIONS ON THE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OPERATIONS OR ON THE TOTAL AREA OF EXPOSED SOIL.



SILT FENCE WITH WIRE BACKING WITH SEDIMENT TUBE

DETAIL B
SCALE: N.T.S.

EPSC QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	PHASE 1	PHASE II	MAX OR TOTAL
209-03.23	FILTER SOCK (24 INCH)	L.F.	-	130	130
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	1260	1360	2620
209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	3085	3500	6585
209-08.07	ROCK CHECK DAM	EA	2	-	2
209-08.08	ENHANCED ROCK CHECK DAM	E.A.	11	12	23
209-09.01	SANDBAGS	BAG	500	500	1000
209-09.40	CURB INLET PROTECTION (TYPE 1)	EA	-	1	1
209-09.41	CURB INLET PROTECTION (TYPE 2)	EA	2	2	4
209-09.43	CURB INLET PROTECTION (TYPE 4)	EA	-	7	7
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	655	655	655
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	300	-	300
740-10.03	GEOTEXTILE (TYPE III) (EROSION CONTROL)	S.Y.	515	-	515
740-11.03	TEMPORARY SEDIMENT TUBE (18 INCH)	L.F.	1330	490	1820
801-03	WATER	M.G.	21	21	21
801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	210	210	210
801-02.15	FERTILIZER	TON	2	2	2

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
* SF * SF * SF *	SILT FENCE	EC-STR-3B
* SFB * SFB * SFB *	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	ENHANCED ROCK CHECK DAM (TRAPEZOIDAL DITCH)	EC-STR-6A
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
** SOCK ** SOCK **	FILTER SOCK	EC-STR-8
* HVF * HVF	HIGH VISIBILITY FENCE	S-F-1
TCE	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
** TUBE ** TUBE **	SEDIMENT TUBE	EC-STR-37
	ROCK CHECK DAM (V-DITCH)	EC-STR-6
1	CURB INLET PROTECTION (TYPE 1)	EC-STR-39
2	CURB INLET PROTECTION (TYPE 2)	EC-STR-39
4	CURB INLET PROTECTION (TYPE 4)	EC-STR-39A

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EROSION PREVENTION AND SEDIMENT CONTROL NOTES

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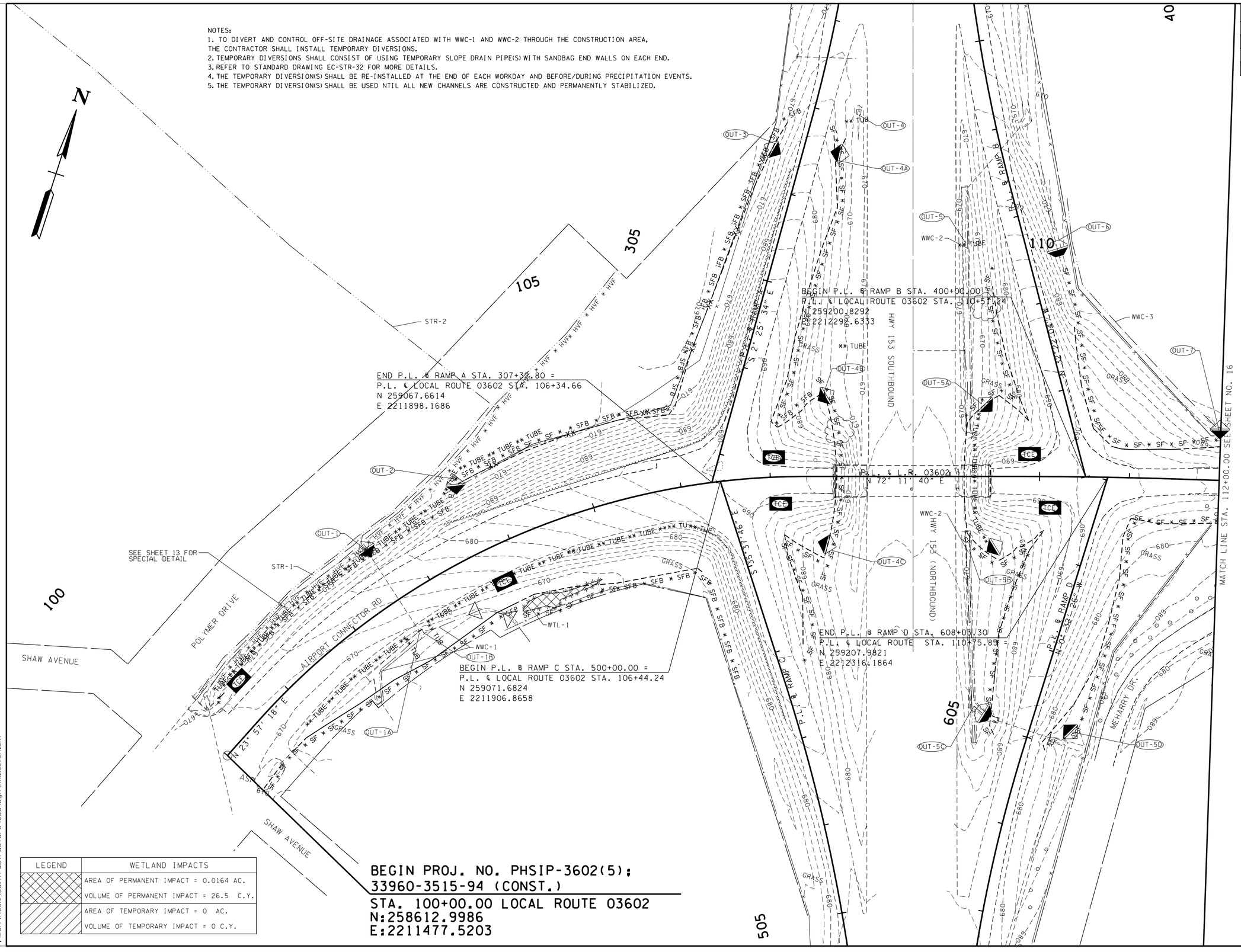
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	14
CONST.	2015	PHSIP-3602(5)	14

NOTES:
1. TO DIVERT AND CONTROL OFF-SITE DRAINAGE ASSOCIATED WITH WWC-1 AND WWC-2 THROUGH THE CONSTRUCTION AREA, THE CONTRACTOR SHALL INSTALL TEMPORARY DIVERSIONS.
2. TEMPORARY DIVERSIONS SHALL CONSIST OF USING TEMPORARY SLOPE DRAIN PIPE(S) WITH SANDBAG END WALLS ON EACH END.
3. REFER TO STANDARD DRAWING EC-STR-32 FOR MORE DETAILS.
4. THE TEMPORARY DIVERSION(S) SHALL BE RE-INSTALLED AT THE END OF EACH WORKDAY AND BEFORE/DURING PRECIPITATION EVENTS.
5. THE TEMPORARY DIVERSION(S) SHALL BE USED NTIL ALL NEW CHANNELS ARE CONSTRUCTED AND PERMANENTLY STABILIZED.



LEGEND	WETLAND IMPACTS
	AREA OF PERMANENT IMPACT = 0.0164 AC.
	VOLUME OF PERMANENT IMPACT = 26.5 C.Y.
	AREA OF TEMPORARY IMPACT = 0 AC.
	VOLUME OF TEMPORARY IMPACT = 0 C.Y.

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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN PHASE I

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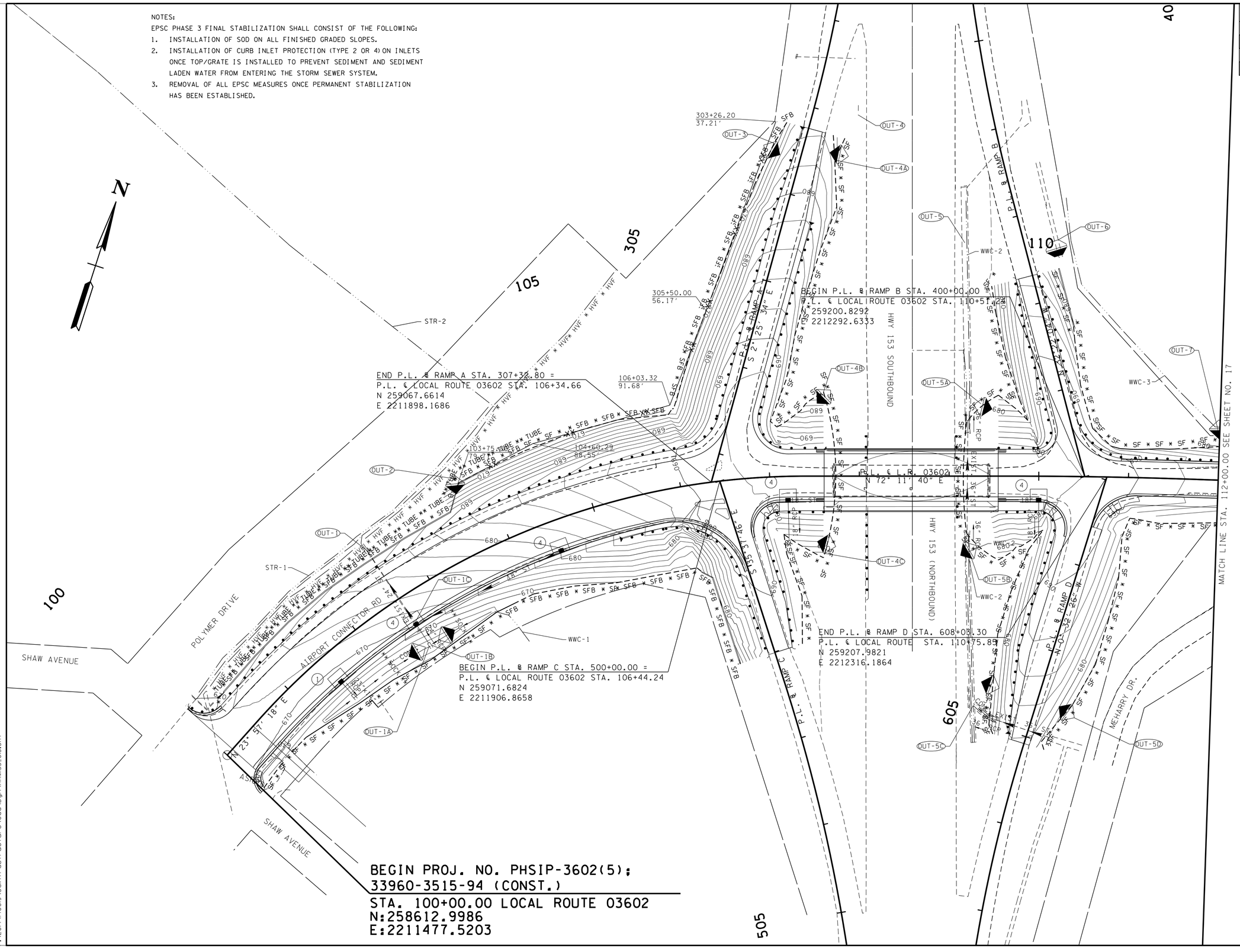
NOTES:

EPSC PHASE 3 FINAL STABILIZATION SHALL CONSIST OF THE FOLLOWING:

1. INSTALLATION OF SOD ON ALL FINISHED GRADED SLOPES.
2. INSTALLATION OF CURB INLET PROTECTION (TYPE 2 OR 4) ON INLETS ONCE TOP/GRATE IS INSTALLED TO PREVENT SEDIMENT AND SEDIMENT LADEN WATER FROM ENTERING THE STORM SEWER SYSTEM.
3. REMOVAL OF ALL EPSC MEASURES ONCE PERMANENT STABILIZATION HAS BEEN ESTABLISHED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	15
CONST.	2015	PHSIP-3602(5)	15



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN PHASE II

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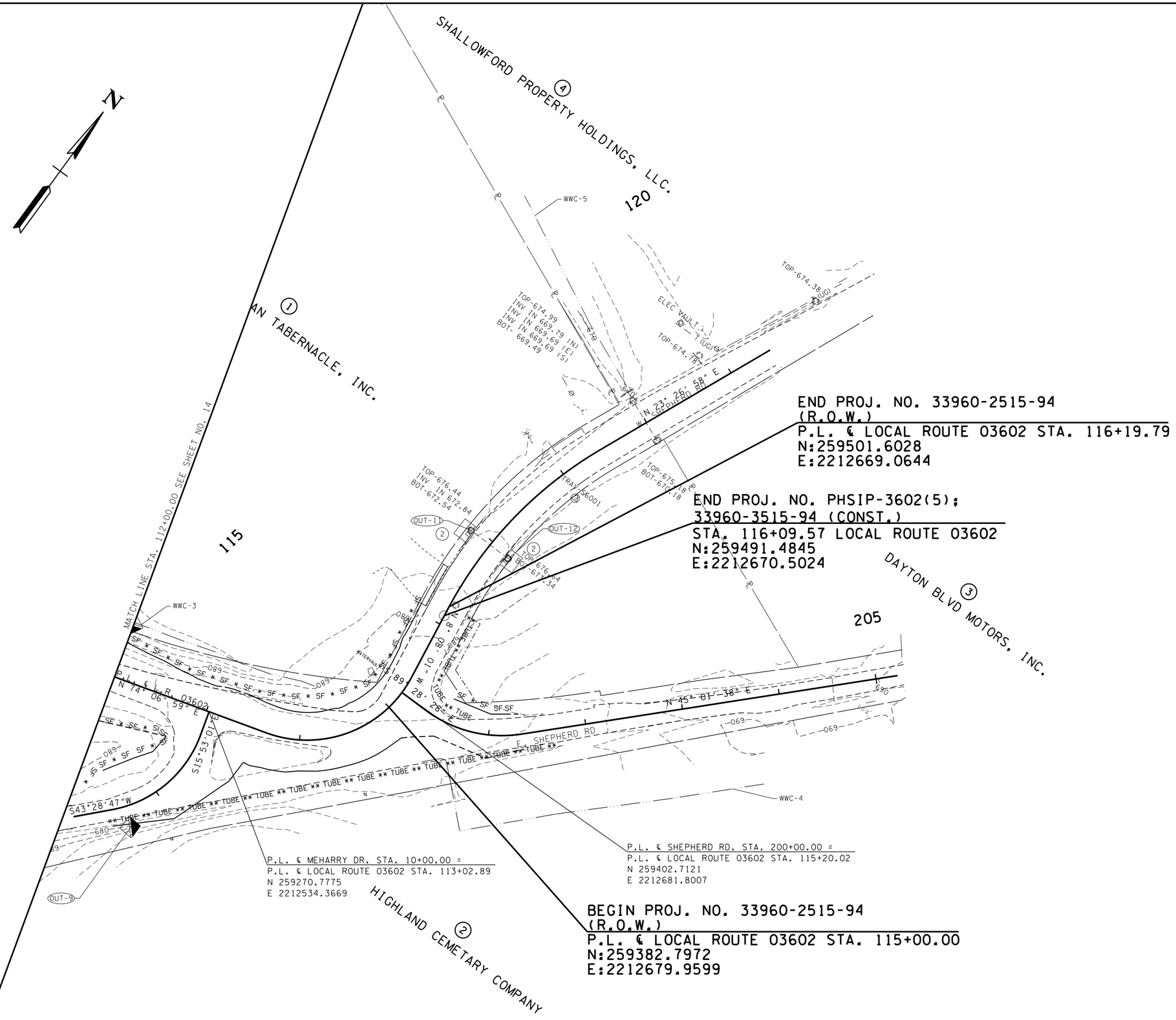
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	16
CONST.	2015	PHSIP-3602(5)	16



END PROJ. NO. 33960-2515-94
(R.O.W.)
P.L. ℄ LOCAL ROUTE 03602 STA. 116+19.79
N:259501.6028
E:2212669.0644

END PROJ. NO. PHSIP-3602(5);
33960-3515-94 (CONST.)
STA. 116+09.57 LOCAL ROUTE 03602
N:259491.4845
E:2212670.5024

P.L. ℄ MEHARRY DR. STA. 10+00.00 =
P.L. ℄ LOCAL ROUTE 03602 STA. 113+02.89
N 259270.7775
E 2212534.3669

P.L. ℄ SHEPHERD RD. STA. 200+00.00 =
P.L. ℄ LOCAL ROUTE 03602 STA. 115+20.02
N 259402.7121
E 2212681.8007

BEGIN PROJ. NO. 33960-2515-94
(R.O.W.)
P.L. ℄ LOCAL ROUTE 03602 STA. 115+00.00
N:259382.7972
E:2212679.9599

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN PHASE I

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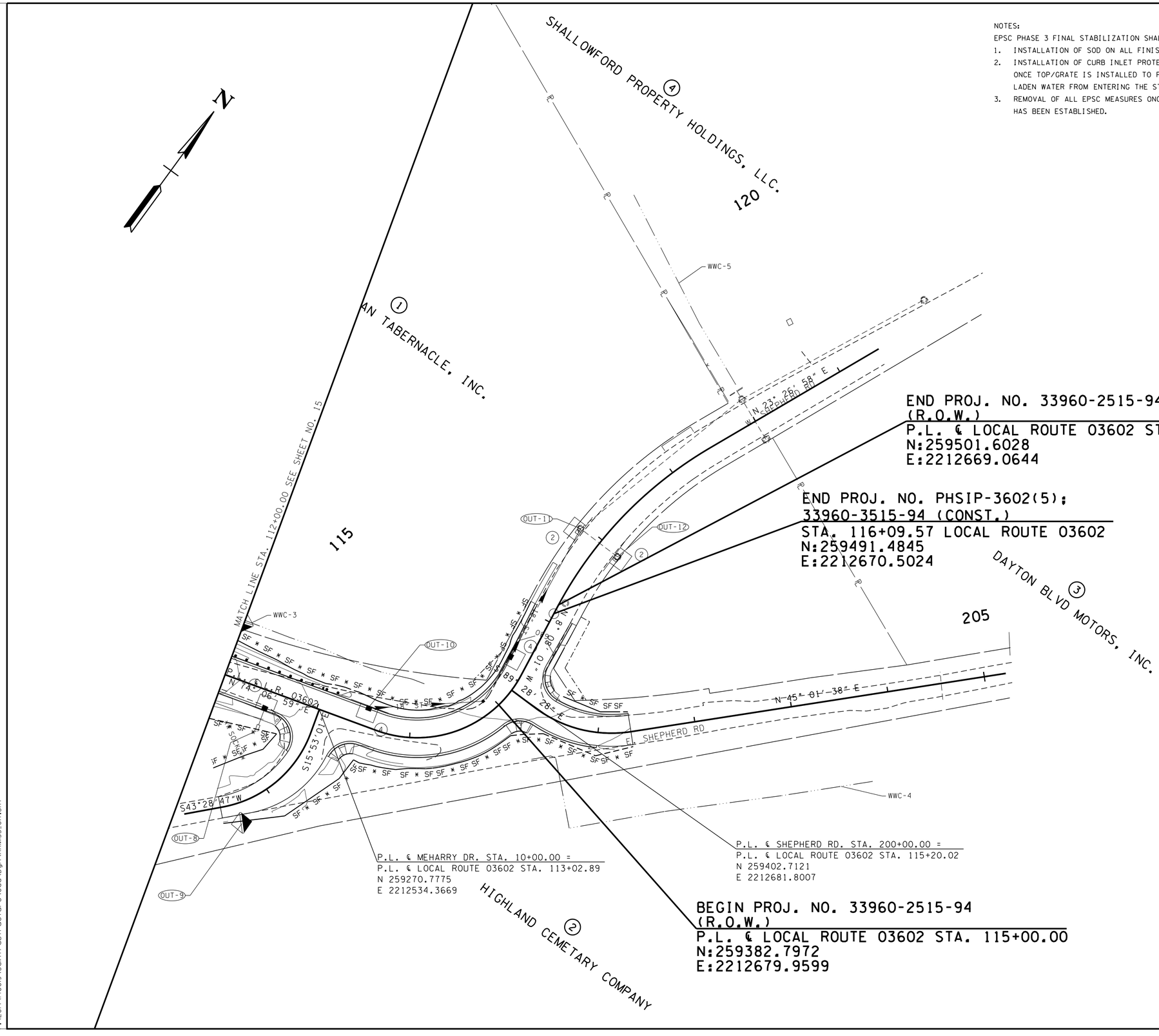
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	17
CONST.	2015	PHSIP-3602(5)	17

NOTES:

EPSC PHASE 3 FINAL STABILIZATION SHALL CONSIST OF THE FOLLOWING:

1. INSTALLATION OF SOD ON ALL FINISHED GRADED SLOPES.
2. INSTALLATION OF CURB INLET PROTECTION (TYPE 2 OR 4) ON INLETS ONCE TOP/GRATE IS INSTALLED TO PREVENT SEDIMENT AND SEDIMENT LADEN WATER FROM ENTERING THE STORM SEWER SYSTEM.
3. REMOVAL OF ALL EPSC MEASURES ONCE PERMANENT STABILIZATION HAS BEEN ESTABLISHED.



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN PHASE II

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18
CONST.	2015	PHSIP-3602(5)	18

PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

A. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES OR TRAFFIC LANE AND SHOULDER WHERE THE TRAFFIC LANE IS BEING USED BY TRAFFIC, CAUSED BY BASE, PAVING OR RESURFACING:

1. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 2 INCHES:

a. WARNING SIGNS, UNEVEN LANES (W8-11) AND/OR SHOULDER DROP-OFF WITH PLAQUE (W8-17 AND W8-17P), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

b. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.

c. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.

d. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN SEVEN WORKDAYS AFTER THE CONDITION IS CREATED.

2. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES. TRAFFIC IS NOT TO BE ALLOWED TO TRAVERSE THIS DIFFERENCE IN ELEVATION.

a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

(1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

(2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

b. IF THE DIFFERENCE IN ELEVATION IS ELIMINATED OR DECREASED TO 2 INCHES OR LESS BY THE END OF EACH WORKDAY, CONES MAY BE USED DURING DAYLIGHT HOURS IN LIEU OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES MENTIONED IN PARAGRAPH a, PROVIDED WARNING SIGNS ARE ERECTED. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

c. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3.5 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE ENGINEER. SEE PARAGRAPH a REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 2 MILES IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

3. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 6 INCHES BUT NOT EXCEEDING 18 INCHES, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:

a. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

(1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

(2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

IN ORDER TO USE THIS METHOD, THE CONTRACTOR MUST REDUCE THE DIFFERENCE IN ELEVATION TO 6 INCHES OR LESS BY THE END OF THE WORKDAY THAT THE CONDITION IS CREATED.

b. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.

c. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO SIX INCHES OR LESS.

d. THE CONTRACTOR SHALL PROVIDE SEPARATION BY PORTABLE BARRIER RAIL.

FOR PRECEDING CONDITIONS a, b, AND c, THE CONTRACTOR SHALL USE THE SHOULDER DROP-OFF WARNING SIGN WITH PLAQUE (W8-17 AND W8-17P). IT SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN THE SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

4. FOR DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 18 INCHES.

SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

IN THIS SITUATION THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

B. IF THE DIFFERENCE IN ELEVATION IS WITHIN 30 FEET OF THE NEAREST TRAFFIC LANE BEING USED BY TRAFFIC CAUSED BY GRADING, EXCAVATION FOR UTILITIES, DRAINAGE STRUCTURES, UNDERCUTTING, ETC.:

1. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 3/4 INCH AND NOT EXCEEDING 2 INCHES.

WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

2. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES:

a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

(1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

(2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

3. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 6 INCHES:

a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

(1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

(2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

b. ELIMINATE VERTICAL OFFSET BY CONSTRUCTING A STONE WEDGE OR GRADING TO A 4:1 SLOPE, OR FLATTER, OR USE PORTABLE BARRIER RAIL.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE WITHIN 8 FEET OF A TRAFFIC LANE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

C. IF THE DIFFERENCE IN ELEVATION IS FARTHER THAN 8 FEET FROM THE NEAREST TRAFFIC LANE BUT NOT MORE THAN 30 FEET FROM THE NEAREST TRAFFIC LANE:

SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.

2. WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

TRAFFIC CONTROL SPECIAL NOTES

1. THE TRAFFIC CONTROL PLAN IS NOT ALL INCLUSIVE. THE TCP PROVIDES SEVERAL DETAILED DRAWINGS AND LAYOUTS INDICATING THE TRAFFIC CONTROL NECESSARY FOR THE DIFFERENT CONSTRUCTION ACTIVITIES ANTICIPATED FOR THIS PROJECT. IN THE EVENT IT IS REQUIRED OR THE CONTRACTOR NEEDS TO MAKE ADJUSTMENTS TO THE TCP, IT SHALL BE SUBMITTED TO THE CONSTRUCTION ENGINEER AND THE CITY OF CHATTANOOGA'S DEPARTMENT OF TRANSPORTATION FOR REVIEW AND APPROVAL BEFORE IMPLEMENTATION.

2. THIS TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE CURRENT EDITION OF THE MUTCD.

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PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18A
CONST.	2015	PHSIP-3602(5)	18A

TRAFFIC CONTROL PHASING NOTES:

PHASE I

PHASE I WILL CONSIST OF CONSTRUCTION OF THE OUTSIDE EASTBOUND LANE OF THE PROPOSED BRIDGE, THE RAMPS, THE OUTSIDE LANES OF L.R. 03602, MEHARRY DRIVE, AND SHEPHERD RD.

ALL STATE, COUNTY, AND CITY ROADWAYS WILL REMAIN OPEN WITH ACCESS PROVIDED AT ALL TIMES THROUGHOUT PHASE I EXCEPT FOR THE ROAD CLOSURE EAST OF THE BRIDGE STATION 110+87.53 TO 114+55.55.

ACCESS TO RESIDENCES AND BUSINESSES MUST BE PROVIDED AT ALL TIMES.

CONSTRUCTION ACTIVITIES FOR THIS PHASE INCLUDED:
- EAST BOUND LANE OF THE PROPOSED BRIDGE
- RAMPS
- OUTSIDE LANES OF L.R. 03602
- MEHARRY DRIVE
- SHEPHERD RD.

TRAFFIC CONTROL PHASING NOTES:

PHASE II

PHASE II WILL CONSIST OF CONSTRUCTION OF THE REMAINING PORTION OF THE PROPOSED BRIDGE, THE RAMPS, AND THE INSIDE LANES OF L.R. 03602.

ALL STATE, COUNTY, AND CITY ROADWAYS WILL REMAIN OPEN WITH ACCESS PROVIDED AT ALL TIMES THROUGHOUT PHASE II.

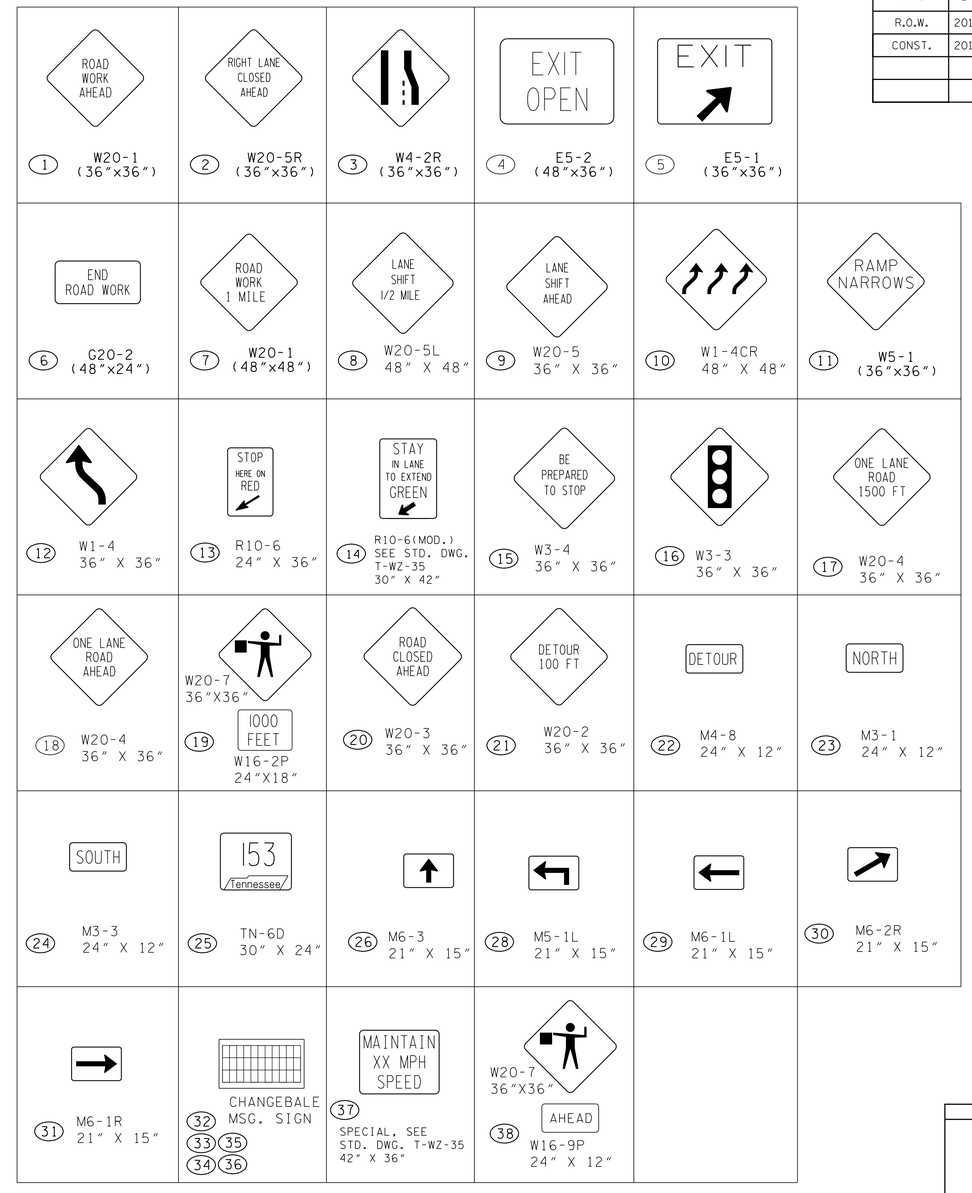
ACCESS TO RESIDENCES AND BUSINESSES MUST BE PROVIDED AT ALL TIMES.

CONSTRUCTION ACTIVITIES FOR THIS PHASE INCLUDED:
- REMAINING PORTION OF THE PROPOSED BRIDGE
- RAMPS
- INSIDE LANES OF L.R. 03602
- RESURFACING S.R. 153

TRAFFIC CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	M.U.T.C.D. NO.	UNITS	PHASE 1	PHASE 2	DETOUR	MAX. OR TOTAL
705-04.50	PORTABLE BARRIER RAIL DELINEATOR	------	EA.	153	160		313
705-08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	------	EA.	8	9		17
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	------	L.F.	3050	3165		6215
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	------	EA.	203	161	12	376
712-06	SIGNS (CONSTRUCTION)	E5-1	S.F.	9			9
		E5-2	S.F.	16	9		25
		G20-2	S.F.	48	32		80
		M3-1	S.F.			28	28
		M3-3	S.F.			30	30
		M4-8	S.F.			58	58
		M5-1L	S.F.			9	9
		M6-1L	S.F.			11	11
		M6-1R	S.F.			26	26
		M6-2R	S.F.			2	2
		M6-3	S.F.			15	15
		R10-6	S.F.		12		12
		R10-6(MOD)	S.F.		18		18
		TN-6D	S.F.			145	145
		W1-4	S.F.	18	36	9	63
		W1-4CR	S.F.	32	32	9	73
		W3-3	S.F.		18		18
		W3-4	S.F.		18		18
		W4-2	S.F.	18	9		27
		W5-1	S.F.	20	10		30
		W5-4	S.F.	32	32		64
		W16-2P	S.F.		3		3
		W16-9P	S.F.		2		2
		W20-1	S.F.	154	172		326
		W20-2	S.F.			9	9
		W20-3	S.F.	18		36	342
		W20-4	S.F.		18		18
		W20-5	S.F.	91	89		180
		W20-7	S.F.		18		18
		* SPECIAL	S.F.		21		21
712-05.01	WARNING LIGHTS (TYPE A)	------	EA.	16		3	19
712-07.03	TEMPORARY BARRICADES (TYPE III)	------	L.F.	132		36	168
712-08.03	ARROW BOARD (TYPE C)	------	EA.	2	2		4
713-02.14	FLEXIBLE DELINEATOR (WHITE)	------	EA.	113	126		239
713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	R11-2	S.F.	90		30	120
713-16.01	CHANGEABLE MESSAGE SIGN UNIT	------	EA.	1		5	6
716-01.06	TEMPORARY RAISED PAVEMENT MARKER, WHITE	------	EA.	301	294		595
716-01.07	TEMPORARY RAISED PAVEMENT MARKER, YELLOW	------	EA.	83	102		185
716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	------	L.M.	1.0	0.8		3
716-05.02	PAINTED PAVEMENT MARKING (8" BARRIER LINE)	------	L.F.	15000	15000		30000
716-05.05	PAINTED PAVEMENT MARKING (STOP LINE)	------	L.F.	24			24
716-08.20	REMOVAL OF PAVEMENT MARKING (LINE)	------	L.M.	2.0	0.8		3

* SPECIAL SIGN - SEE TDOT STANDARD DRAWING T-WZ-35



* 39 TYPE III BARRICADE ROAD CLOSURE w/ TYPE A WARNING LIGHTS

* SEE TDOT STANDARD DRAWING T-S-18

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TRAFFIC CONTROL NOTES

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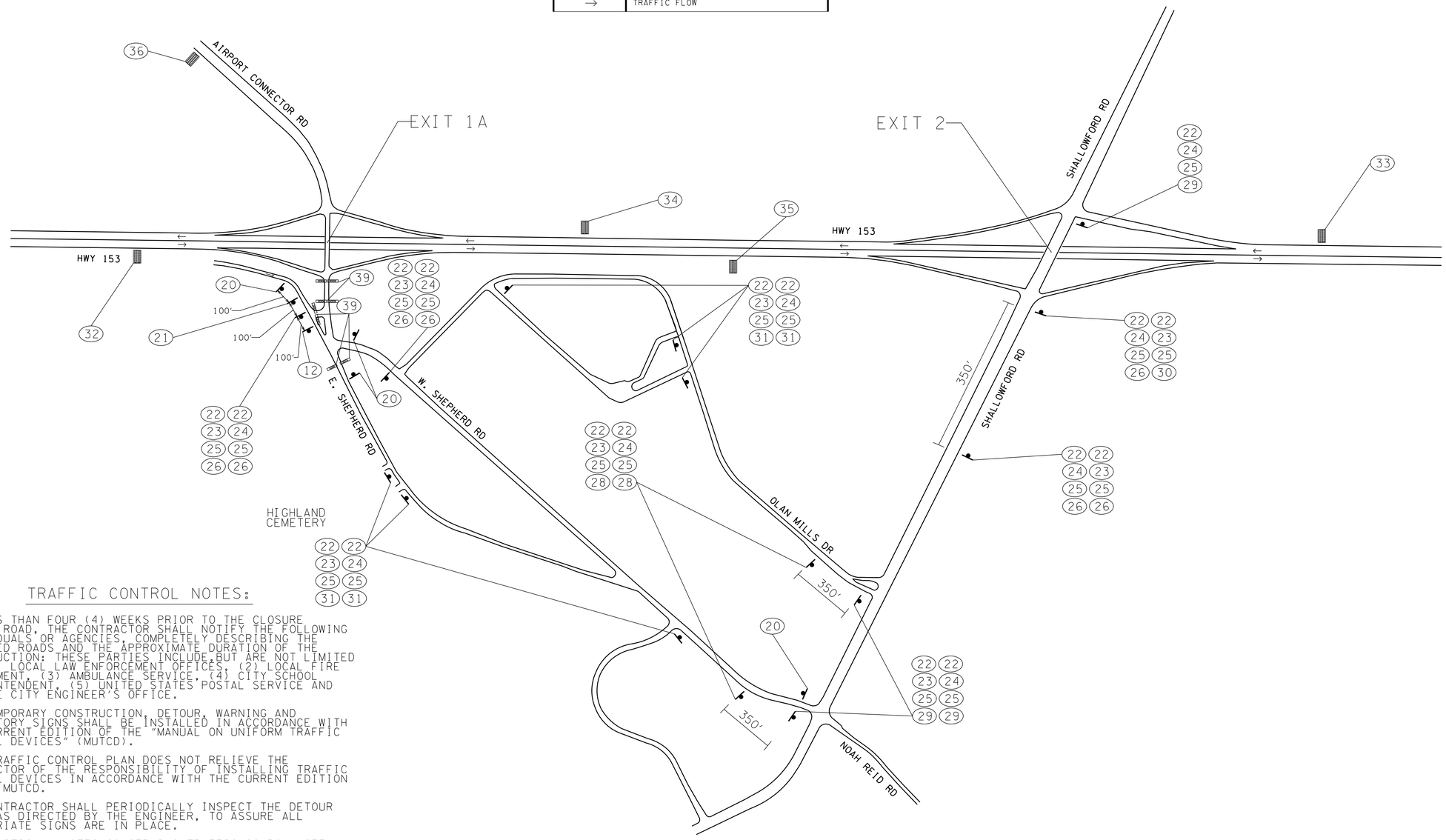
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	PHSIP-3602(5)	18B

TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	SIGN (CONSTRUCTION)
	TEMPORARY BARRICADE (TYPE III)
	CHANGEABLE MESSAGE SIGN
→	TRAFFIC FLOW



TRAFFIC CONTROL NOTES:

1. NO LESS THAN FOUR (4) WEEKS PRIOR TO THE CLOSURE OF THE ROAD, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING INDIVIDUALS OR AGENCIES, COMPLETELY DESCRIBING THE AFFECTED ROADS AND THE APPROXIMATE DURATION OF THE CONSTRUCTION: THESE PARTIES INCLUDE,BUT ARE NOT LIMITED TO, (1) LOCAL LAW ENFORCEMENT OFFICES, (2) LOCAL FIRE DEPARTMENT, (3) AMBULANCE SERVICE, (4) CITY SCHOOL SUPERINTENDENT, (5) UNITED STATES POSTAL SERVICE AND (6) THE CITY ENGINEER'S OFFICE.
2. ALL TEMPORARY CONSTRUCTION, DETOUR, WARNING AND REGULATORY SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD).
3. THIS TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE CURRENT EDITION OF THE MUTCD.
4. THE CONTRACTOR SHALL PERIODICALLY INSPECT THE DETOUR ROUTE AS DIRECTED BY THE ENGINEER, TO ASSURE ALL APPROPRIATE SIGNS ARE IN PLACE.
5. FOR ADDITIONAL NOTES CONCERNING TRAFFIC CONROL, SEE TRAFFIC CONTROL SHEET 18.
6. ROAD CLOSED SIGNS SHALL BE MOUNTED ABOVE TYPE III BARRICADES.
7. THE CHANGEABLE MESSAGE SIGN UNIT (32) SHALL SAY "SHEPHERD RD CLOSED, USE EXIT 2."
8. THE CHANGEABLE MESSAGE SIGN UNIT (35) SHALL SAY "SHEPHERD RD CLOSED AHEAD, USE THIS EXIT."
9. THE CHANGEABLE MESSAGE SIGN UNIT (33) SHALL SAY "SHEPHERD ROAD CLOSED USE THIS EXIT."
10. THE CHANGEABLE MESSAGE SIGN UNIT (34) SHALL SAY "SHEPHERD ROAD DETOUR, USE THIS EXIT."
11. THE CHANGEABLE MESSAGE SIGN UNIT (36) SHALL SAY "EAST SHEPHERD RD CLOSED AHEAD, USE 153 NORTH."

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DETOUR MAP

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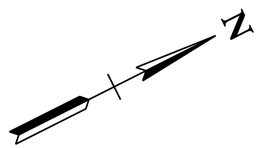
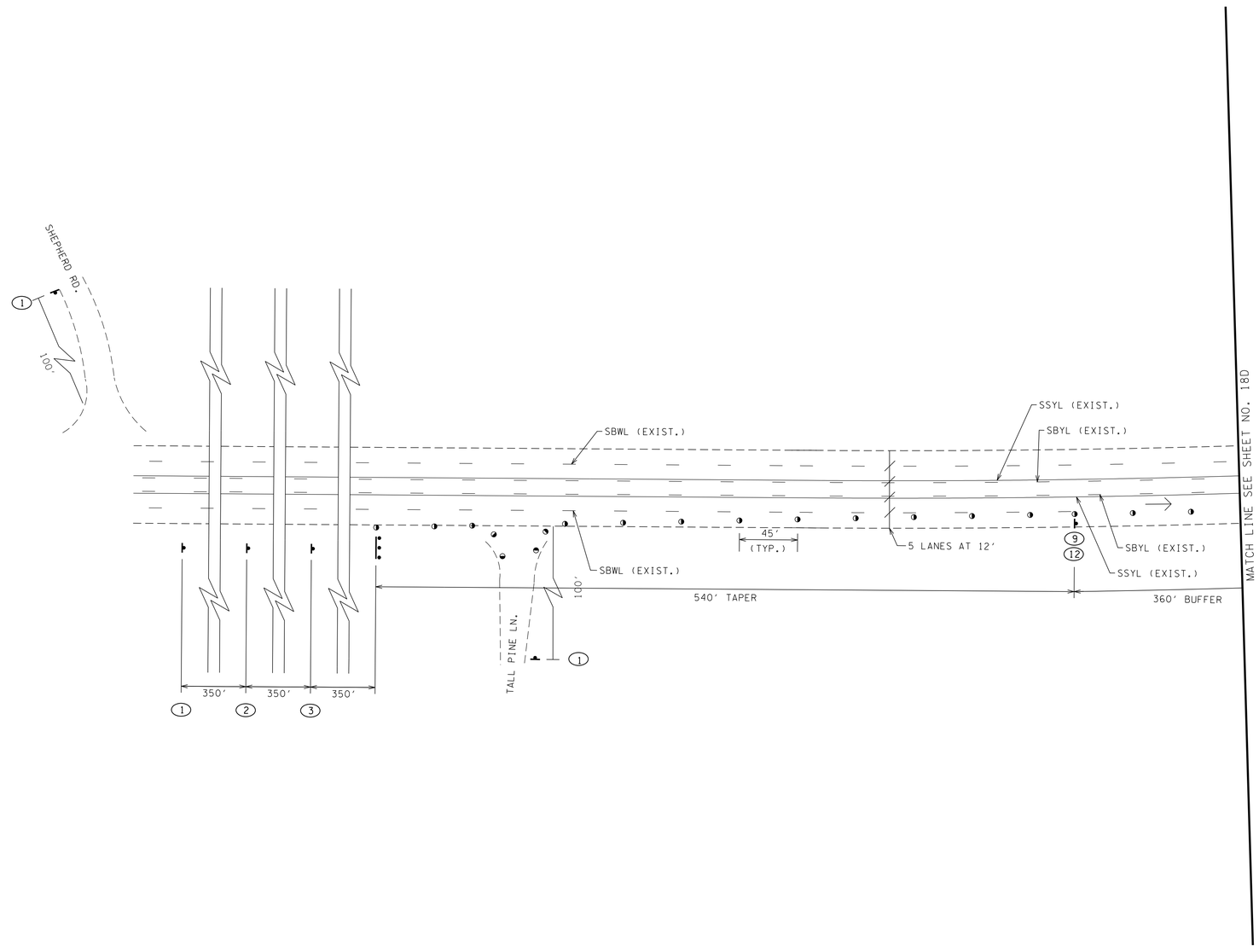
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18B
CONST.	2015	PHSIP-3602(5)	18C





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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EXISTING PAVEMENT LINES DIGITIZED FROM AERIALS FOR GRAPHICAL REPRESENTATION

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	ARROW BOARD TYPE C

TRAFFIC CONTROL PLAN PHASE 1

SCALE: 1"=50'

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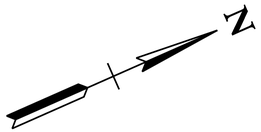
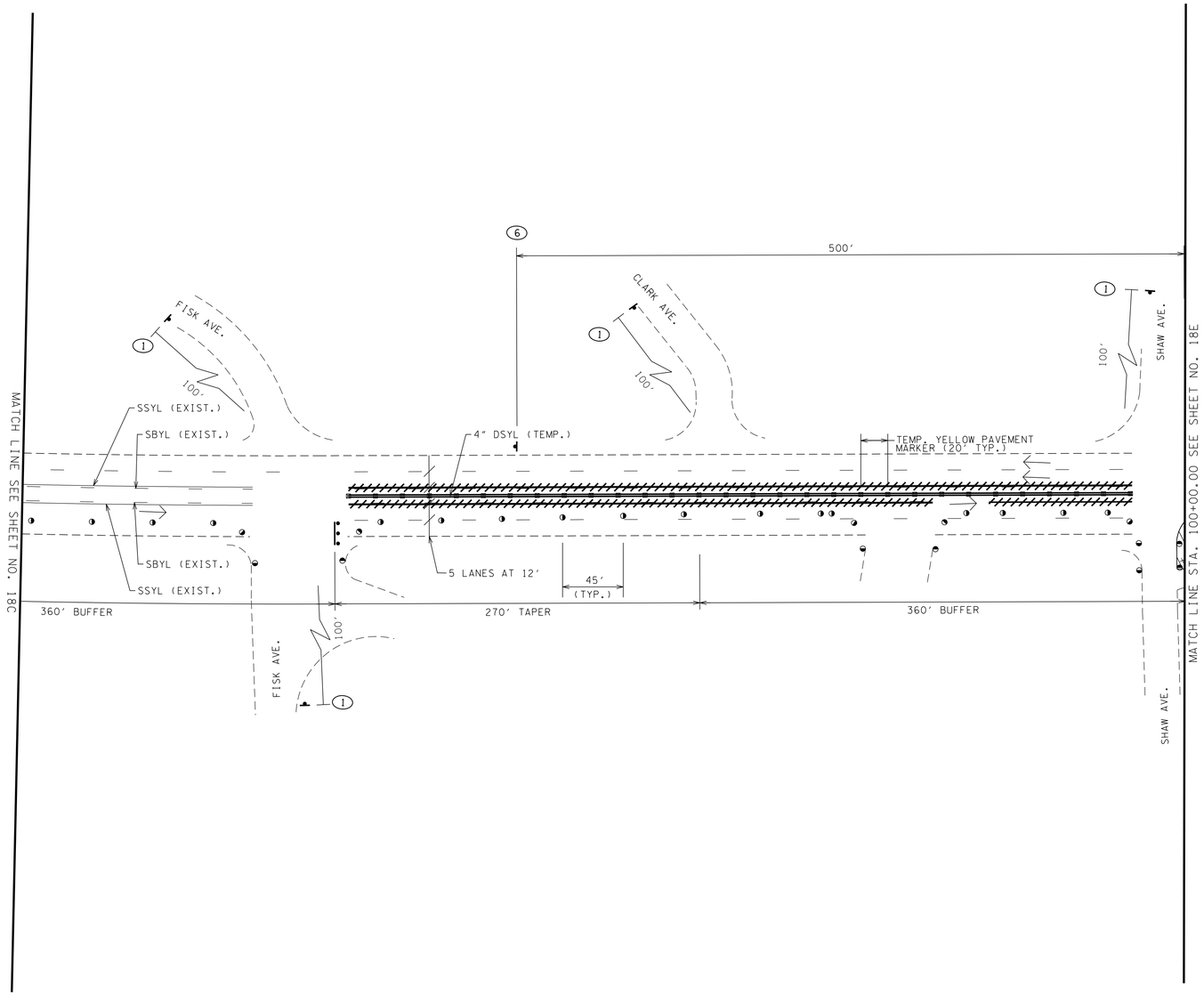
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18C
CONST.	2015	PHSIP-3602(5)	18D





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TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	ARROW BOARD TYPE C
	REMOVE PAVEMENT STRIPING

EXISTING PAVEMENT LINES DIGITIZED FROM AERIALS FOR GRAPHICAL REPRESENTATION

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TRAFFIC CONTROL PLAN PHASE 1

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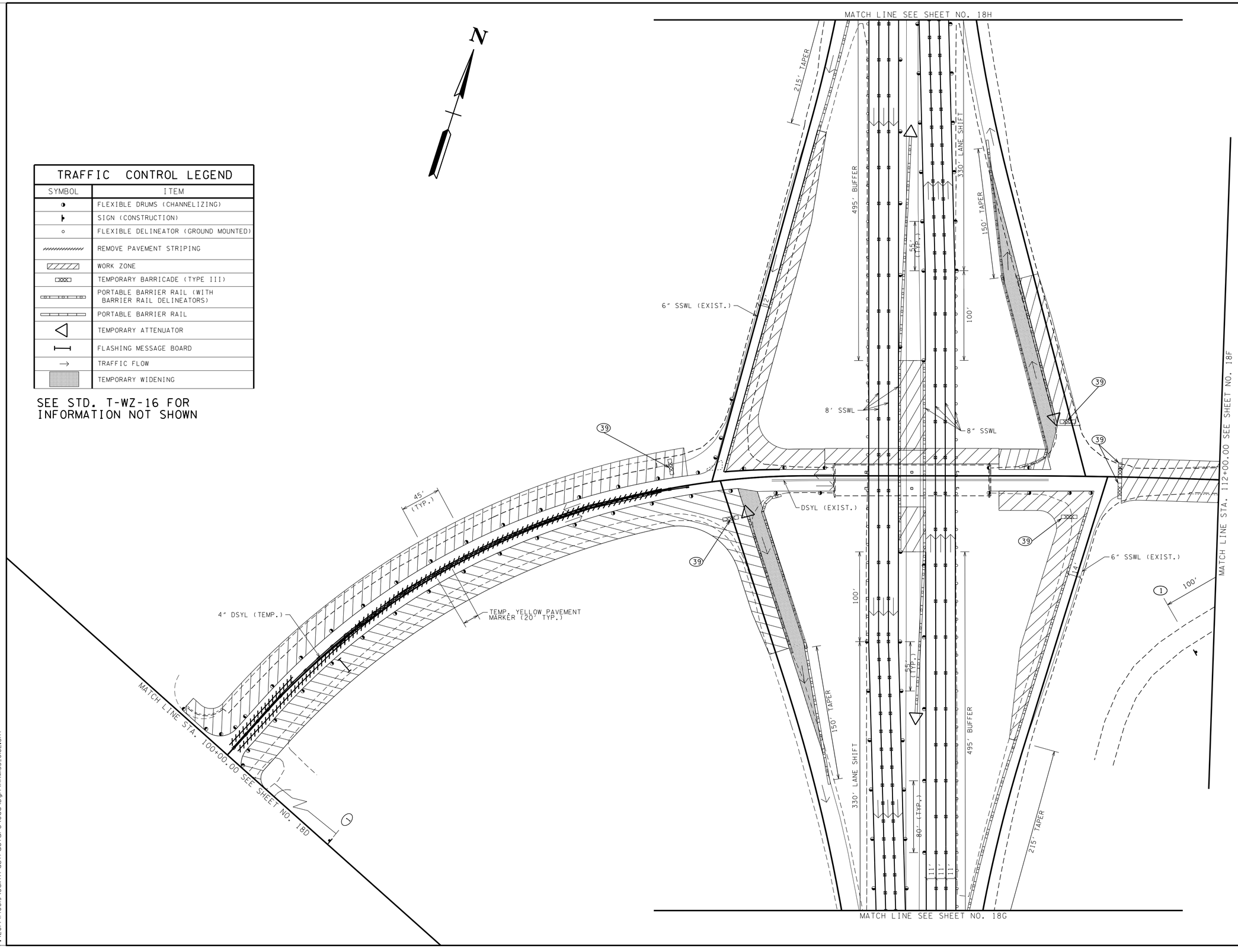
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18D
CONST.	2015	PHSIP-3602(5)	18E

TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	FLEXIBLE DELINEATOR (GROUND MOUNTED)
	REMOVE PAVEMENT STRIPING
	WORK ZONE
	TEMPORARY BARRICADE (TYPE III)
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	FLASHING MESSAGE BOARD
→	TRAFFIC FLOW
	TEMPORARY WIDENING

SEE STD. T-WZ-16 FOR INFORMATION NOT SHOWN



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TRAFFIC CONTROL PLAN PHASE I

B.O.P. TO STA.112+00

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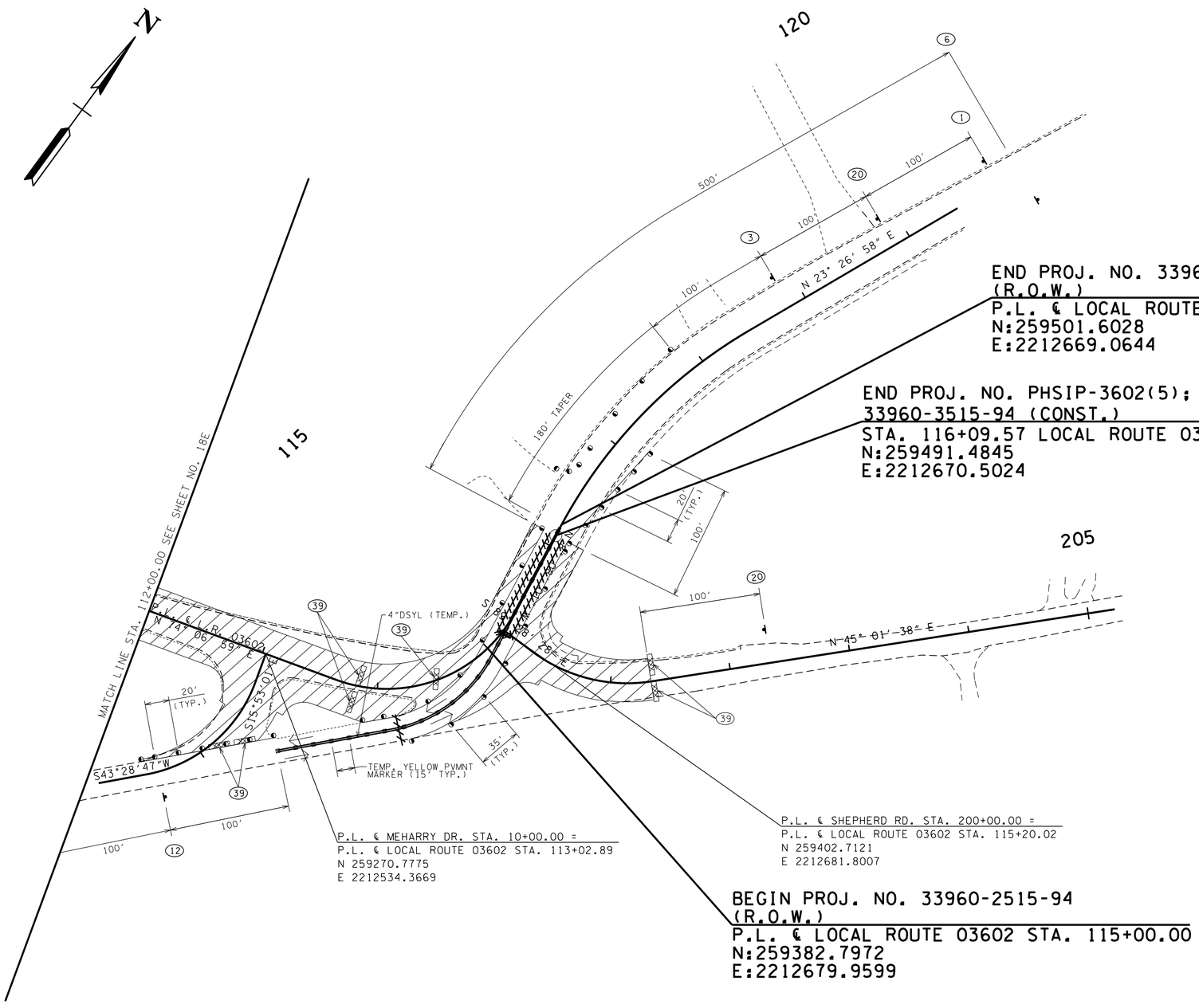
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18E
CONST.	2015	PHSIP-3602(5)	18F



UNOFFICIAL SET

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TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	FLEXIBLE DRUMS (CHANNELIZING)
	REMOVE PAVEMENT STRIPING
	WORK ZONE
	TEMPORARY BARRICADE (TYPE III)
	SIGN (CONSTRUCTION)

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TRAFFIC CONTROL PLAN PHASE I

STA.112+00 TO E.O.P.

SCALE: 1"=50'

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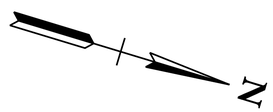
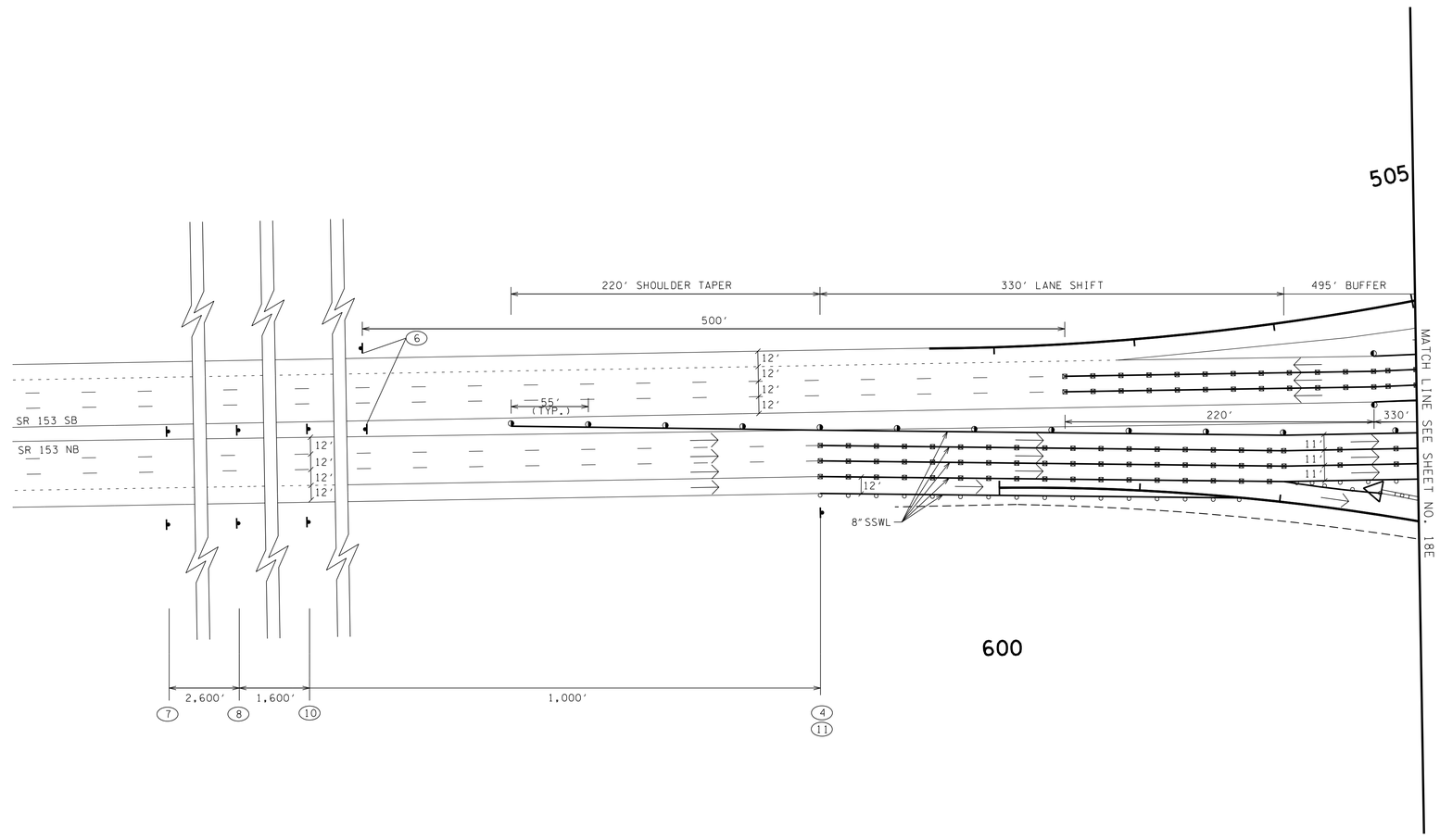
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18F
CONST.	2015	PHSIP-3602(5)	18G





UNOFFICIAL SET

NOT FOR BIDDING

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
◑	FLEXIBLE DRUMS (CHANNELIZING)
▸	SIGN (CONSTRUCTION)
∘	FLEXIBLE DELINEATOR (GROUND MOUNTED)
▭	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
◁	TEMPORARY ATTENUATOR
→	TRAFFIC FLOW

EXISTING PAVEMENT LINES DIGITIZED FROM AERIALS FOR GRAPHICAL REPRESENTATION

SEE STD. T-WZ-16 FOR INFORMATION NOT SHOWN

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TRAFFIC CONTROL PLAN PHASE I

SCALE: 1"=50'

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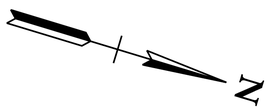
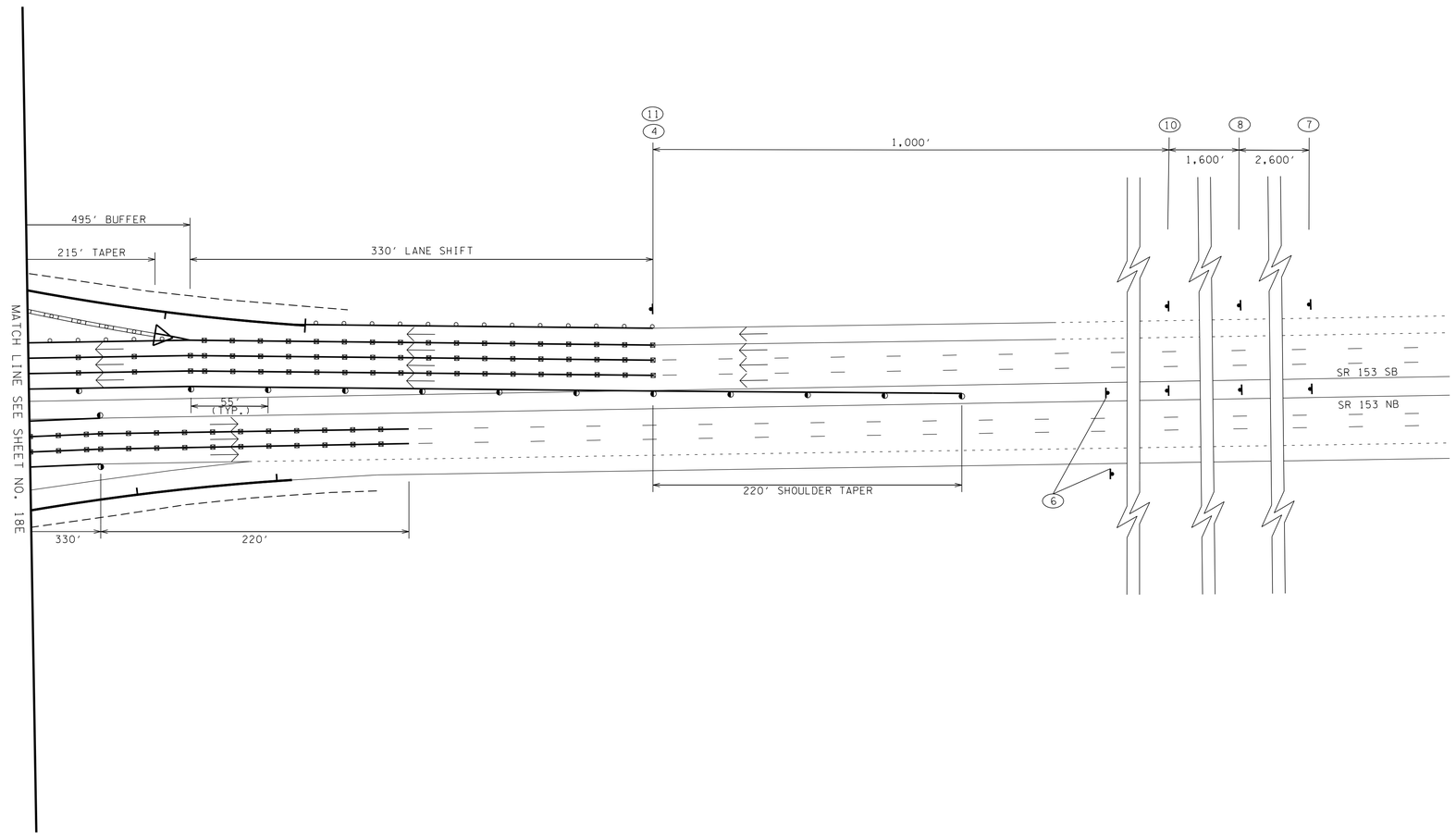
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18G
CONST.	2015	PHSIP-3602(5)	18H





UNOFFICIAL SET

NOT FOR BIDDING

SEALED BY

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE I

SCALE: 1"=50'

EXISTING PAVEMENT LINES DIGITIZED FROM AERIALS FOR GRAPHICAL REPRESENTATION

SEE STD. T-WZ-16 FOR INFORMATION NOT SHOWN

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
◑	FLEXIBLE DRUMS (CHANNELIZING)
▸	SIGN (CONSTRUCTION)
∘	FLEXIBLE DELINEATOR (GROUND MOUNTED)
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
◁	TEMPORARY ATTENUATOR
→	TRAFFIC FLOW

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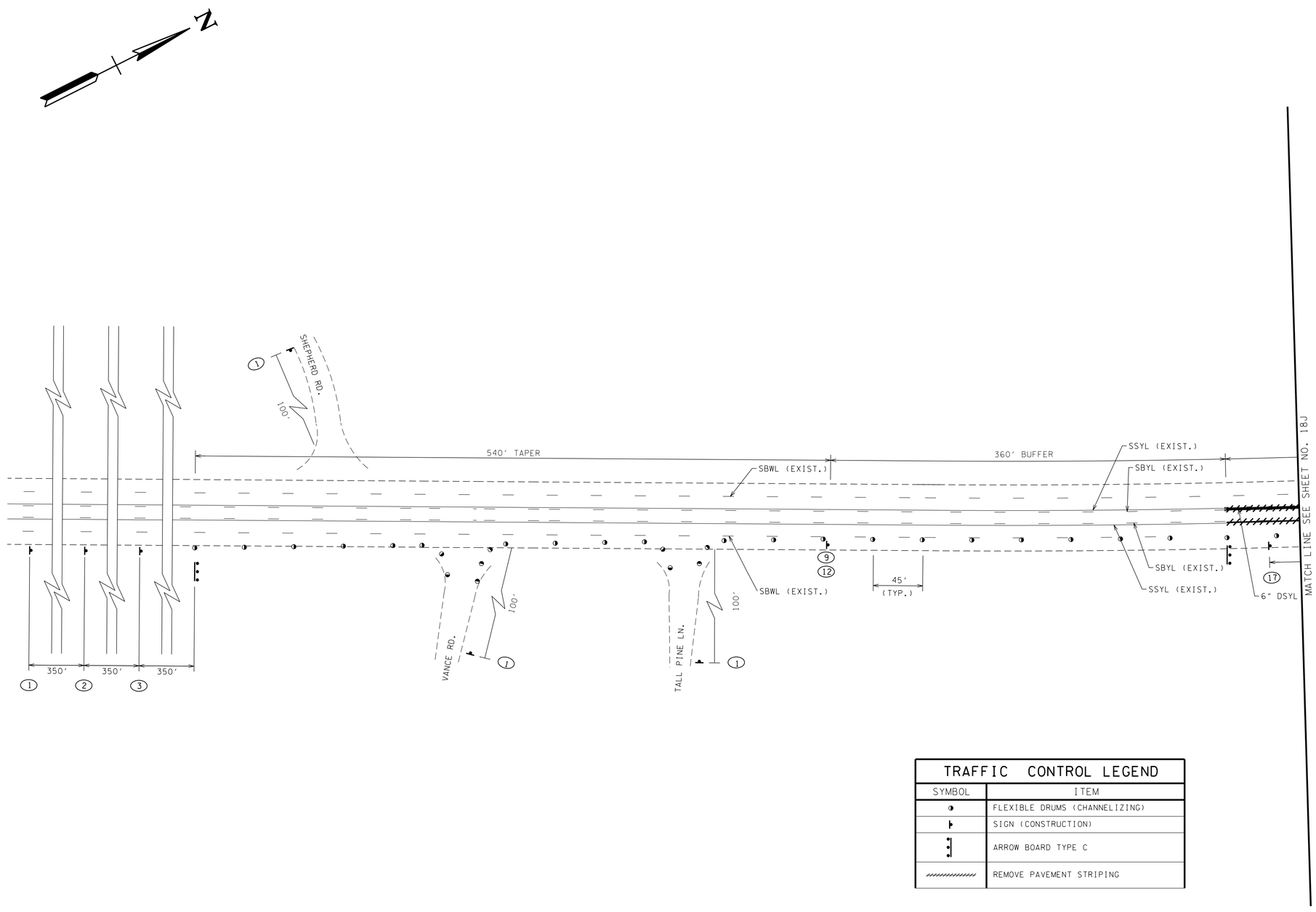
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18H
CONST.	2015	PHSIP-3602(5)	18-I



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	ARROW BOARD TYPE C
	REMOVE PAVEMENT STRIPING

EXISTING PAVEMENT LINES DIGITIZED FROM AERIALS FOR GRAPHICAL REPRESENTATION

UNOFFICIAL SET

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE II

SCALE: 1"=50'

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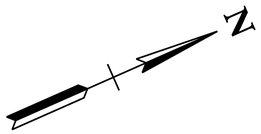
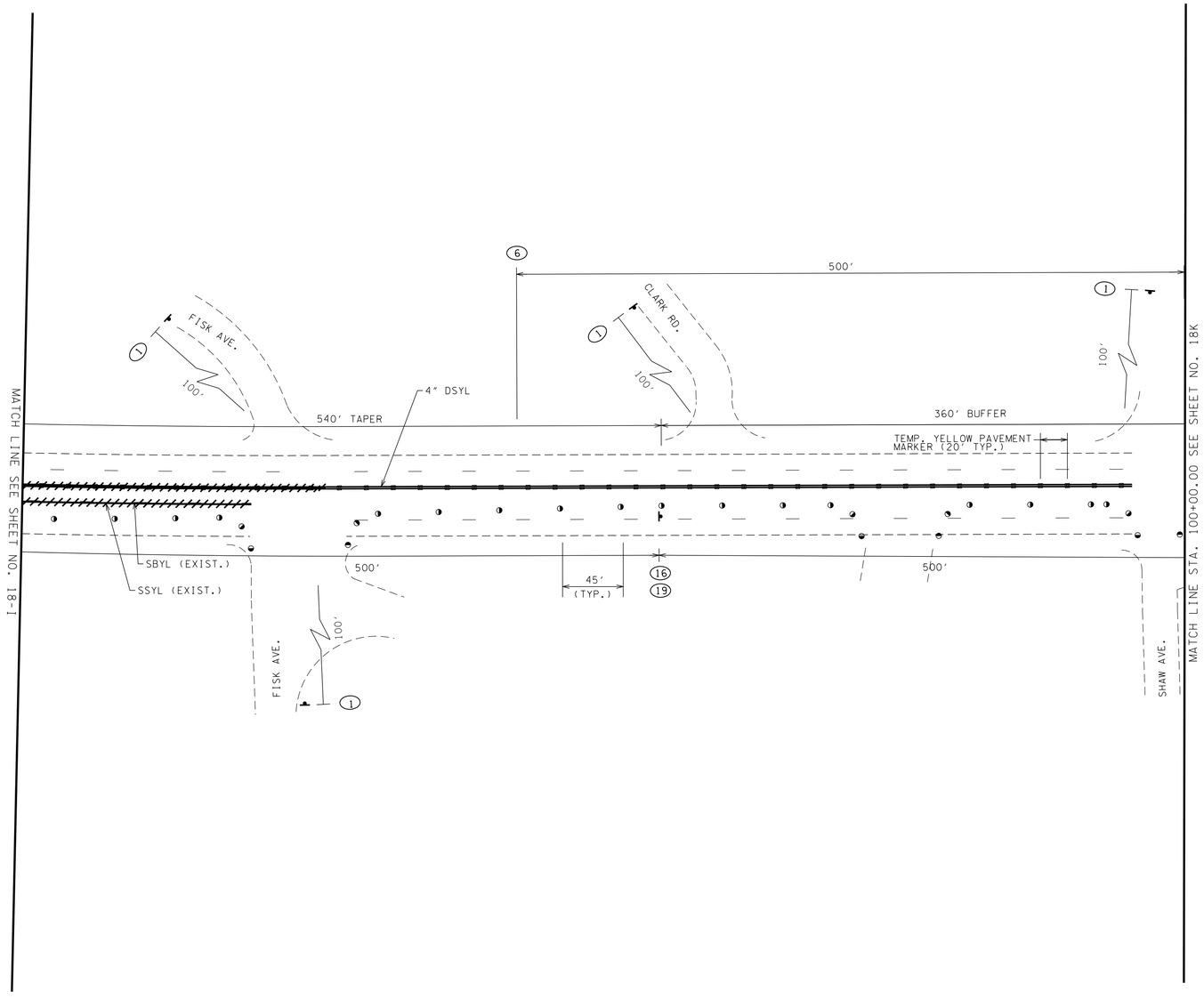
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18-I
CONST.	2015	PHSIP-3602(5)	18J





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TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
◑	FLEXIBLE DRUMS (CHANNELIZING)
⊢	SIGN (CONSTRUCTION)
//////////	REMOVE PAVEMENT STRIPING

EXISTING PAVEMENT LINES DIGITIZED FROM AERIALS FOR GRAPHICAL REPRESENTATION

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE II

SCALE: 1"=50'

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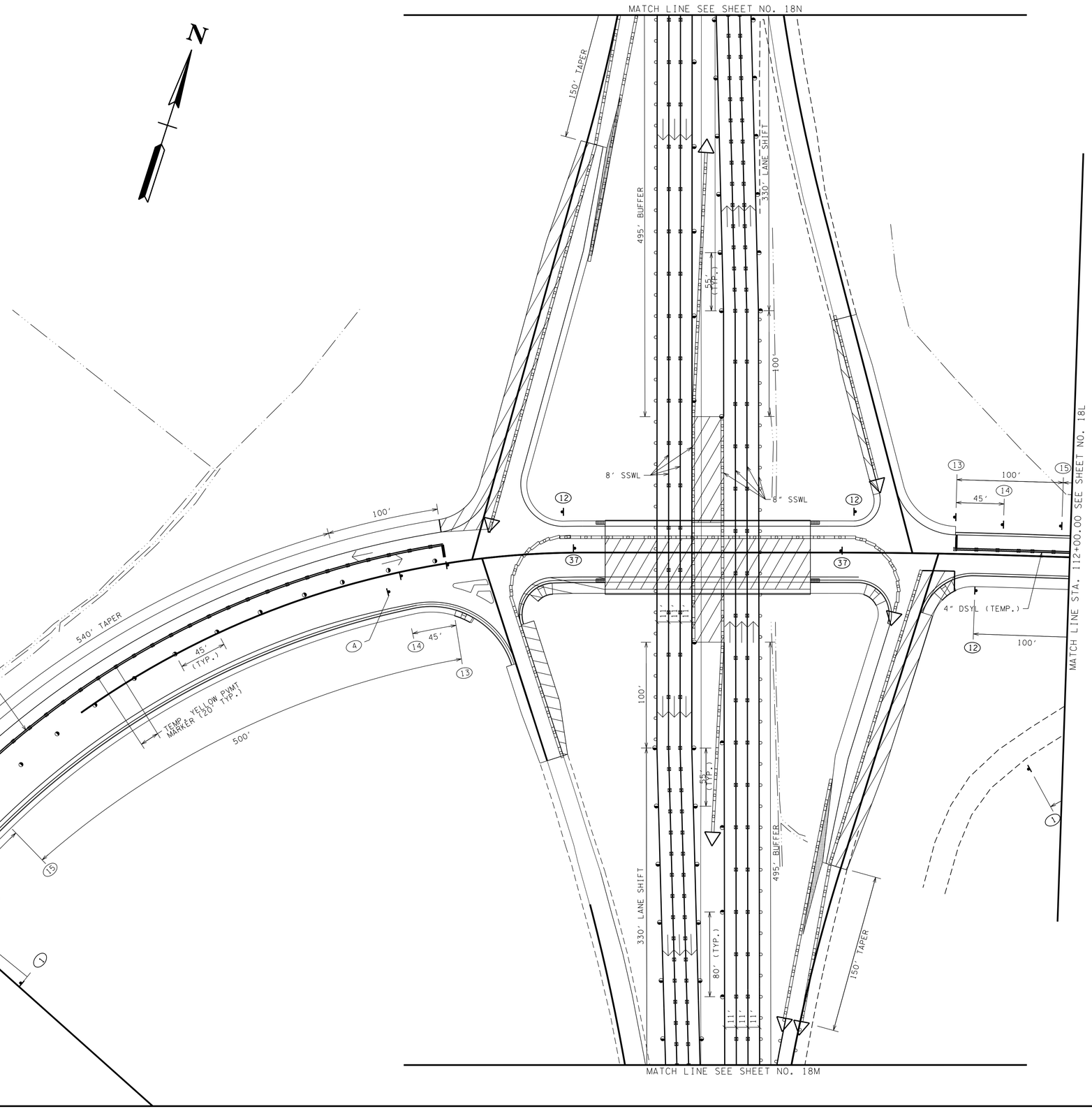
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18J
CONST.	2015	PHSIP-3602(5)	18K

TRAFFIC CONTROL LEGEND

SYMBOL	ITEM
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	ARROW BOARD TYPE C
	WORK ZONE
	TEMPORARY BARRICADE (TYPE III)
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	PORTABLE BARRIER RAIL
	TEMPORARY WIDENING
	TEMPORARY ATTENUATOR

SEE STD. T-WZ-16 FOR INFORMATION NOT SHOWN

SEE STD. T-WZ-32 FOR TEMP. TRAFFIC SIGNAL LAYOUT



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE II

B.O.P. TO STA.112+00

SCALE: 1"=50'

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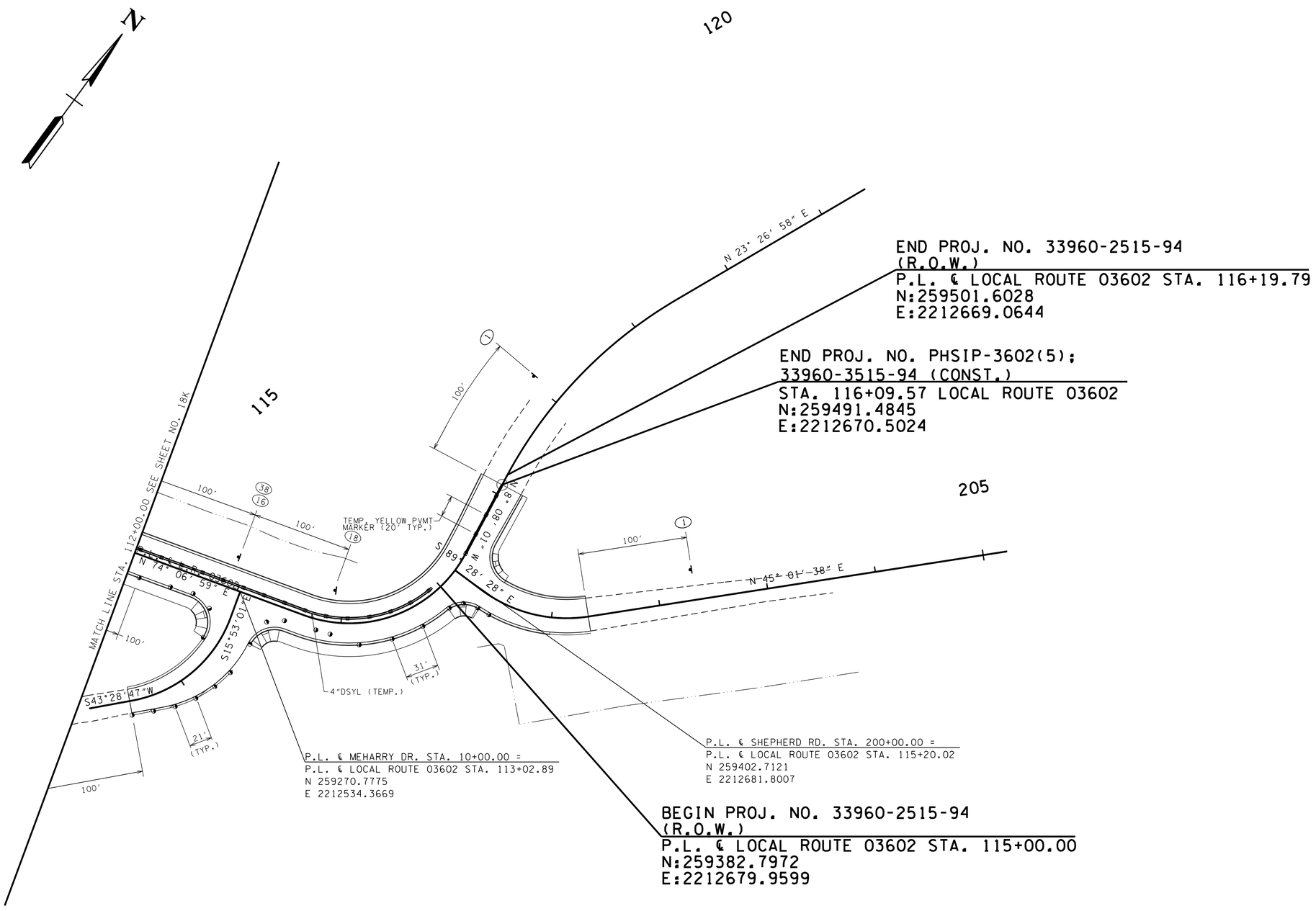
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18K
CONST.	2015	PHSIP-3602(5)	18L



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
◑	FLEXIBLE DRUMS (CHANNELIZING)
⊢	SIGN (CONSTRUCTION)
▨	WORK ZONE
⊠	TEMPORARY BARRICADE (TYPE III)

TRAFFIC CONTROL PLAN PHASE II

STA.112+00 TO E.O.P.

SCALE: 1"=50'

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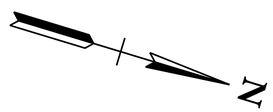
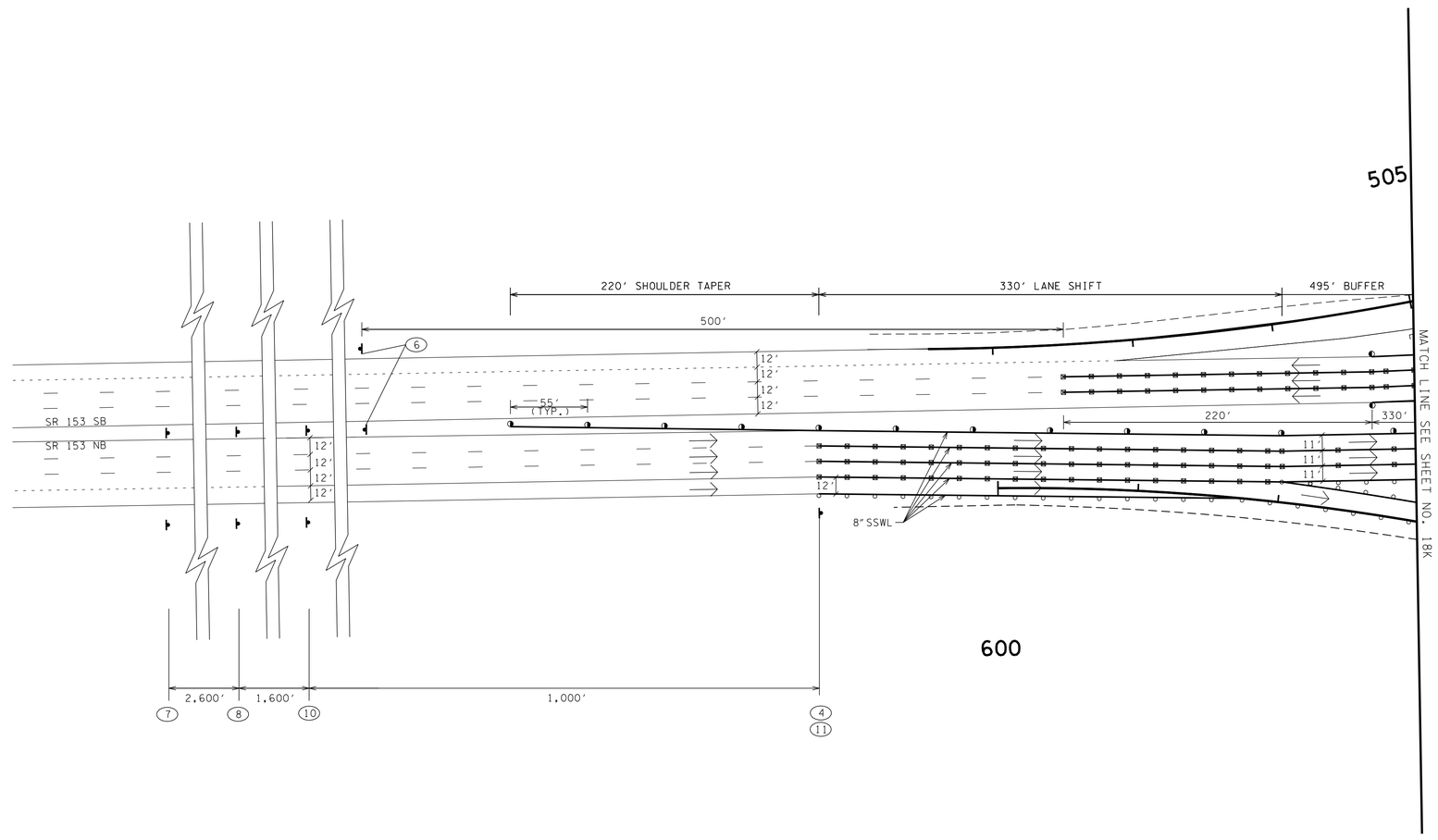
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18L
CONST.	2015	PHSIP-3602(5)	18M





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NOT FOR BIDDING

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
◑	FLEXIBLE DRUMS (CHANNELIZING)
▸	SIGN (CONSTRUCTION)
⊢⊣	FLASHING MESSAGE BOARD
○	FLEXIBLE DELINEATOR (GROUND MOUNTED)

SEE STD. T-WZ-16 FOR INFORMATION NOT SHOWN

EXISTING PAVEMENT LINES DIGITIZED FROM AERIALS FOR GRAPHICAL REPRESENTATION

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE II

SCALE: 1"=50'

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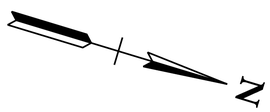
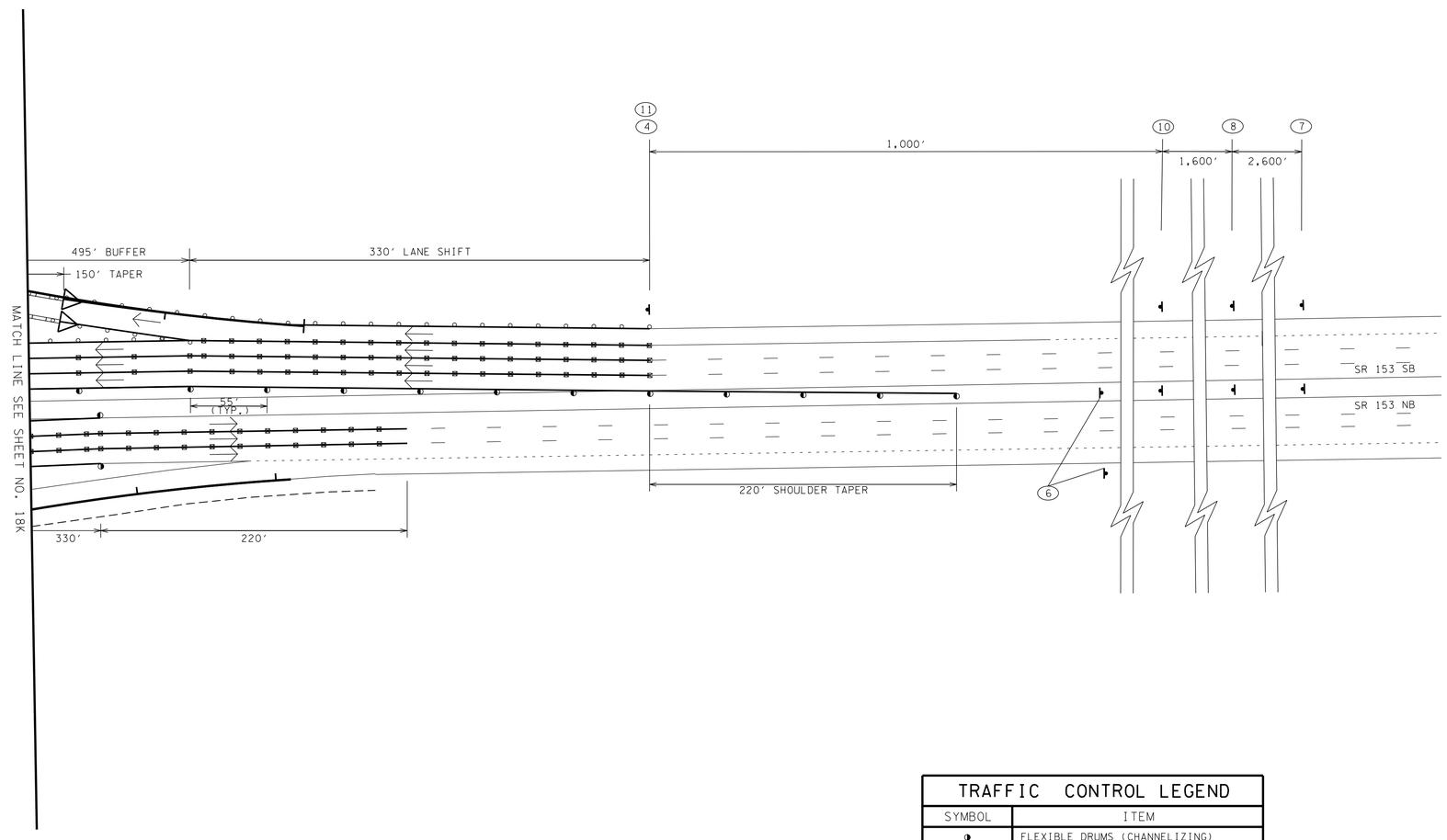
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	18M
CONST.	2015	PHSIP-3602(5)	18N





UNOFFICIAL SET

NOT FOR BIDDING

EXISTING PAVEMENT LINES DIGITIZED FROM AERIALS FOR GRAPHICAL REPRESENTATION

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	ARROW BOARD TYPE C
	REMOVE PAVEMENT STRIPING
	WORK ZONE
	TEMPORARY BARRICADE (TYPE III)
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR

SEE STD. T-WZ-16 FOR INFORMATION NOT SHOWN

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN PHASE II

SCALE: 1"=50'

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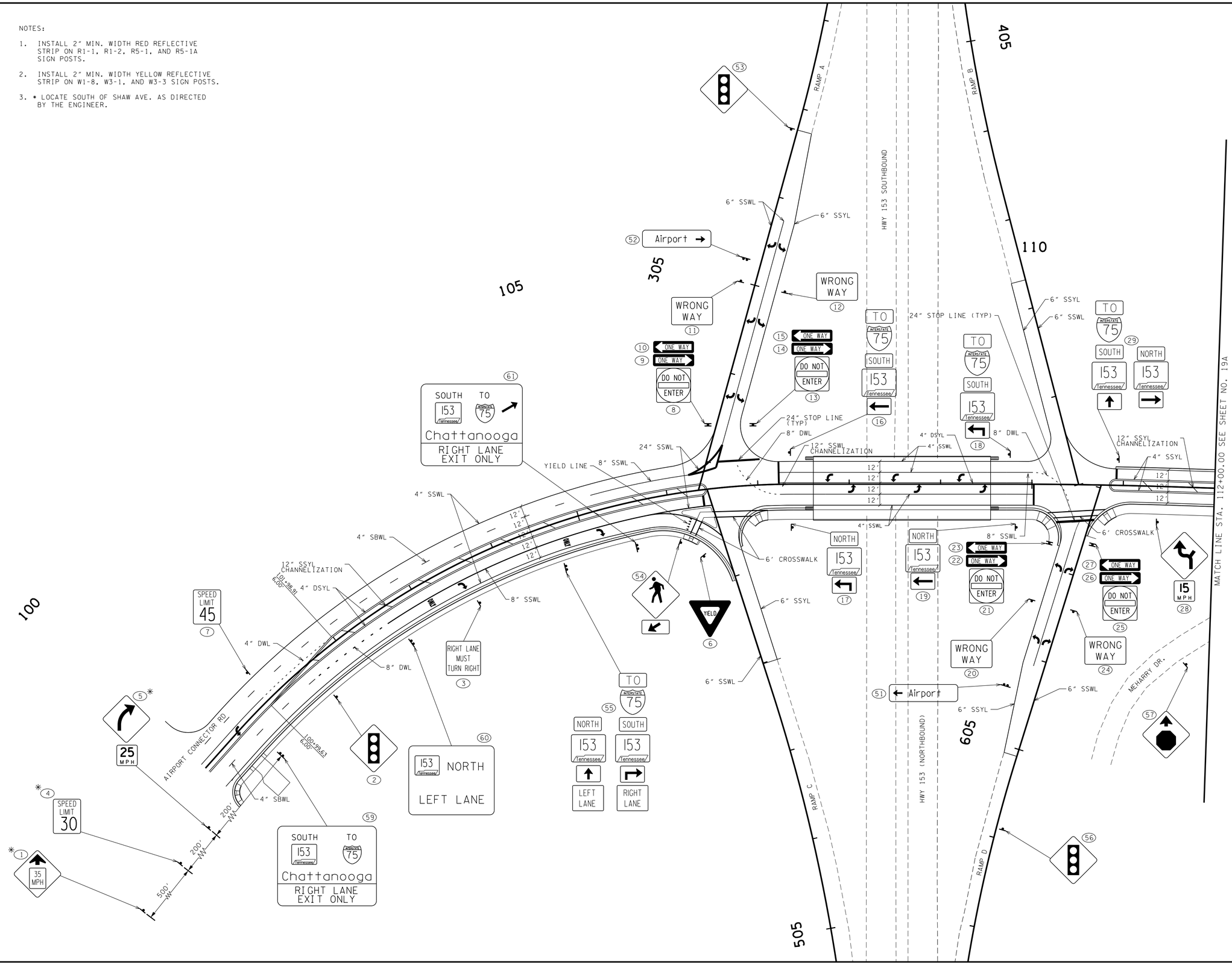
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	19
CONST.	2015	PHSIP-3602(5)	19

NOTES:

1. INSTALL 2" MIN. WIDTH RED REFLECTIVE STRIP ON R1-1, R1-2, R5-1, AND R5-1A SIGN POSTS.
2. INSTALL 2" MIN. WIDTH YELLOW REFLECTIVE STRIP ON W1-8, W3-1, AND W3-3 SIGN POSTS.
3. * LOCATE SOUTH OF SHAW AVE. AS DIRECTED BY THE ENGINEER.



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

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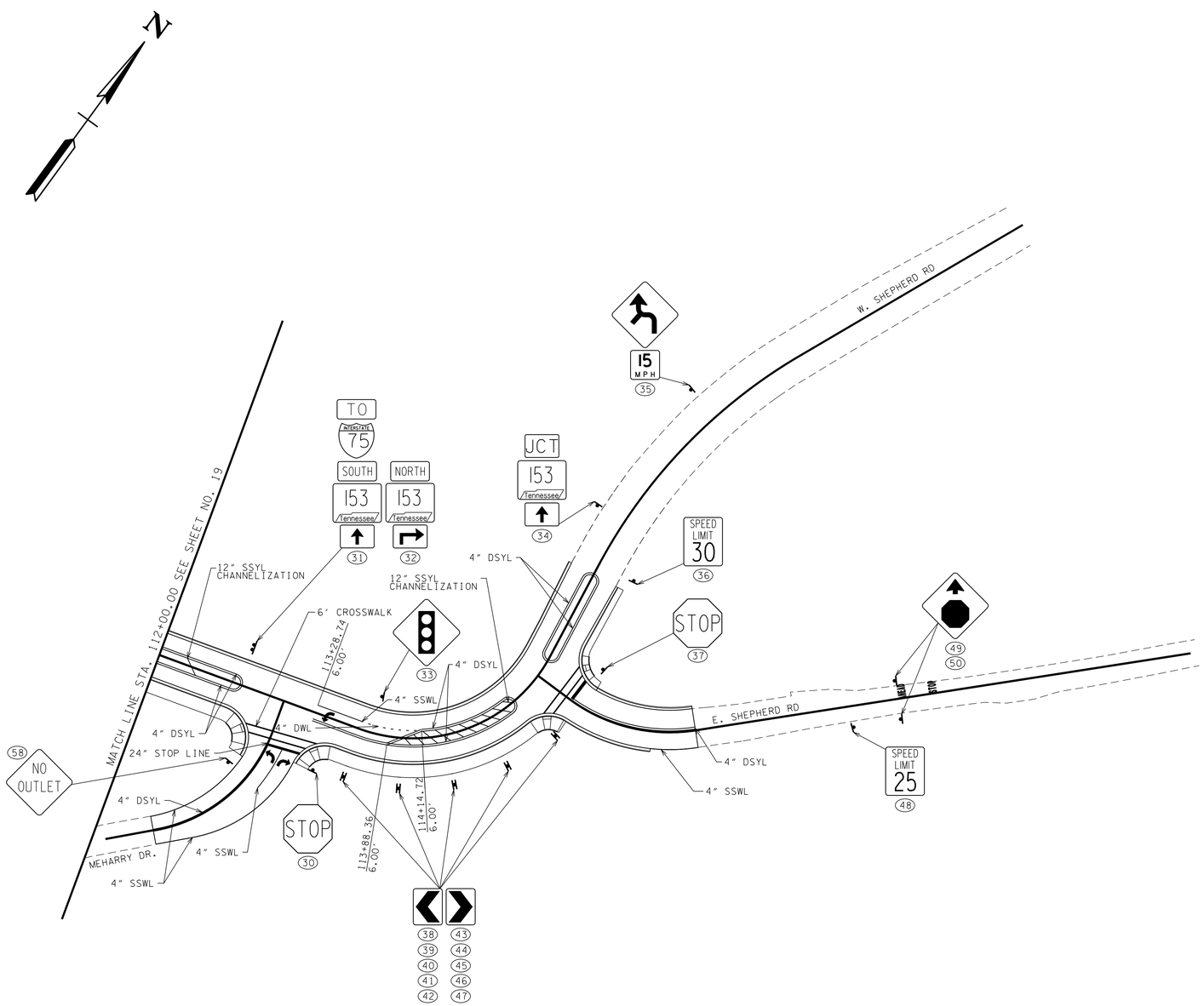
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	19A
CONST.	2015	PHSIP-3602(5)	19A



NOTES:

1. INSTALL 2" MIN. WIDTH RED REFLECTIVE STRIP ON R1-1, R1-2, R5-1, AND R5-1A SIGN POSTS.

2. INSTALL 2" MIN. WIDTH YELLOW REFLECTIVE STRIP ON W1-8, W3-1, AND W3-3 SIGN POSTS.

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STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING PLAN

STA.112+00 TO STA.E.O.P.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	PHSIP-3602(5)	20

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SIGN NO	LEGEND	SHEET NO	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU. YD.	REIN STEEL LBS.		
1	30 MPH W3-5	19	36"	36"									BLACK	YELLOW (REF.)	0.100" SHEET ALUMINUM	P8	13'-6"				5'-0"	
2	W3-3	19	36"	36"									BLACK RED (REF.) GREEN (REF.)	YELLOW (REF.)	0.100" SHEET ALUMINUM	P8	13'-6"				7'-0"	
33		19A															13'-6"				7'-0"	
53		19															13'-6"				5'-0"	
56		19															13'-6"				5'-0"	
3	RIGHT LANE MUST TURN RIGHT R3-7R	19	36"	36"									BLACK	WHITE (REF.)	0.100" SHEET ALUMINUM	P8	12'-6"				7'-0"	
4	SPEED LIMIT 30 R2-1	19	30"	36"									BLACK	WHITE (REF.)	0.100" SHEET ALUMINUM	P8	12'-6"				5'-0"	
36		19A															12'-6"					
5	W1-2R 25 MPH W13-1P	19	36" 18"	36" 18"									BLACK	YELLOW (REF.)	0.100" SHEET ALUMINUM 0.080" SHEET ALUMINUM	P5	12'-0"				5'-0"	REQUIRES SLIP BASE ITEM NO. 713-11.21. SEE STD DWG. T-S-23A.
6	YIELD R1-2	19	36" X 36" X 36"										RED (REF.)	WHITE (REF.)	0.080" SHEET ALUMINUM	P2	12'-6"				7'-0"	
7	SPEED LIMIT 45 R2-1	19	30"	36"									BLACK	WHITE (REF.)	0.100" SHEET ALUMINUM	P8	12'-6"				5'-0"	
8	DO NOT ENTER R5-1	19	36"	36"									WHITE (REF.)	WHITE (REF.) RED (REF.)	0.080" SHEET ALUMINUM	P5	9'-6"				5'-0"	REQUIRES SLIP BASE ITEM NO. 713-11.21. SEE STD DWG. T-S-23A.
13																	9'-6"				5'-0"	
21																	9'-6"				7'-0"	
25																	9'-6"				7'-0"	
9	ONE WAY R6-1R	19	36"	12"									BLACK	WHITE (REF.)	0.080" SHEET ALUMINUM							SIGN NO. 9 MOUNTED BELOW SIGN NO. 8
14																						SIGN NO. 14 MOUNTED BELOW SIGN NO. 13
22																						SIGN NO. 22 MOUNTED BELOW SIGN NO. 21
26																						SIGN NO. 26 MOUNTED BELOW SIGN NO. 25
10	ONE WAY R6-1L	19	36"	12"									BLACK	WHITE (REF.)	0.080" SHEET ALUMINUM							SIGN NO. 10 MOUNTED BELOW SIGN NO. 8
15																						SIGN NO. 15 MOUNTED BELOW SIGN NO. 13
23																						SIGN NO. 23 MOUNTED BELOW SIGN NO. 21
27																						SIGN NO. 27 MOUNTED BELOW SIGN NO. 25
11	WRONG WAY R5-1A	19	36"	24"									WHITE (REF.)	RED (REF.)	0.080" SHEET ALUMINUM	P2	11'-6"				5'-0"	
12																	11'-6"					
20																	11'-6"					
24																	11'-6"					
16	TO M4-5 INTERSTATE 75 M1-1 SOUTH M3-3 153 Tennessee TN-6D M6-1L	19	24" 24" 24" 30" 21"	12" 24" 12" 24" 15"									WHITE BLACK	BLUE (REF.) WHITE (REF.)	0.080" SHEET ALUMINUM	P6	14'-9"				5'-0"	REQUIRES SLIP BASE ITEM NO. 713-11.21. SEE STD DWG. T-S-23A.
17	NORTH M3-1 153 Tennessee TN-6D M5-1L	19	24" 30" 21"	12" 24" 15"									BLACK	WHITE (REF.)	0.080" SHEET ALUMINUM	P8	14'-9"				7'-0"	

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	PHSIP-3602(5)	20A

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SEE STD. DWG. NO. T-S-19

SIGN NO	LEGEND	SHEET NO	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU. YD.	REIN STEEL LBS.		
18	TO M4-5 INTERSTATE 75 M1-1 SOUTH M3-3 153 Tennessee TN-6D M5-1L	19	24" 24" 24" 30" 21"	12" 24" 12" 24" 15"									WHITE BLACK	BLUE (REF.) WHITE (REF.)	0.080" SHEET ALUMINUM	P6	14'-9"				5'-0"	REQUIRES SLIP BASE ITEM NO. 713-11.21. SEE STD DWG. T-S-23A.
19	NORTH M3-1 153 Tennessee TN-6D M6-1L	19	24" 30" 21"	12" 24" 15"									BLACK	WHITE (REF.)	0.080" SHEET ALUMINUM	P8	14'-9"				7'-0"	
28	W1-3MOD 15 MPH W13-1P	19	36" 18"	36" 18"									BLACK	YELLOW (REF.)	0.100" SHEET ALUMINUM 0.080" SHEET ALUMINUM	P5	12'-0"				7'-0"	REQUIRES SLIP BASE ITEM NO. 713-11.21. SEE STD DWG. T-S-23A.
29	M4-5 TO M1-1 INTERSTATE 75 M3-3 SOUTH TN-6D 153 Tennessee M6-3 NORTH M3-1 153 Tennessee TN-6D M6-1R	19	24" 24" 24" 30" 21"	12" 24" 12" 24" 15"									WHITE BLACK	BLUE (REF.) WHITE (REF.)	0.080" SHEET ALUMINUM	P6 P8	14'-9" 14'-9"				7'-0"	REQUIRES SLIP BASE ITEM NO. 713-11.21. SEE STD DWG. T-S-23A. (ON P6)
30 37	STOP R1-1	19A	36"	36"									WHITE (REF.)	RED (REF.)	0.100" SHEET ALUMINUM	P8	13'-0" 13'-0"				7'-0"	
31	TO M4-5 INTERSTATE 75 M1-1 SOUTH M3-3 153 Tennessee TN-6D M6-3	19A	24" 24" 24" 30" 21"	12" 24" 12" 24" 15"									WHITE BLACK	BLUE (REF.) WHITE (REF.)	0.080" SHEET ALUMINUM	P6	14'-9"				7'-0"	REQUIRES SLIP BASE ITEM NO. 713-11.21. SEE STD DWG. T-S-23A.
32	NORTH M3-1 153 Tennessee TN-6D M5-1R	19A	24" 30" 21"	12" 24" 15"									BLACK	WHITE (REF.)	0.080" SHEET ALUMINUM	P8	14'-9"				7'-0"	
34	JCT M2-1 153 Tennessee TN-6D M6-3	19A	21" 30" 21"	15" 24" 15"									BLACK	WHITE (REF.)	0.080" SHEET ALUMINUM	P8	14'-9"				7'-0"	
35	W1-3MOD 15 MPH W13-1P	19A	36" 18"	36" 18"									BLACK	YELLOW (REF.)	0.100" SHEET ALUMINUM 0.080" SHEET ALUMINUM	P5	12'-0"				7'-0"	REQUIRES SLIP BASE ITEM NO. 713-11.21. SEE STD DWG. T-S-23A.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	PHSIP-3602(5)	20B

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SEE STD. DWG. NO. T-S-19

SIGN NO	LEGEND	SHEET NO	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU. YD.	REIN STEEL LBS.		
38	W1-8L	19A	18"	24"									BLACK	YELLOW (REF.)	0.080" SHEET ALUMINUM	P7	11'-6"				7'-0"	
39																	11'-6"					
40																	11'-6"					
41																	11'-6"					
42																	11'-6"					
43	W1-8R	19A	18"	24"									BLACK	YELLOW (REF.)	0.080" SHEET ALUMINUM	P7	11'-6"				7'-0"	
44																	11'-6"					
45																	11'-6"					
46																	11'-6"					
47																	11'-6"					
48	SPEED LIMIT 25 R2-1	19A	30"	36"									BLACK	WHITE (REF.)	0.100" SHEET ALUMINUM	P8	12'-6"				7'-0"	
49	W3-1	19A	36"	36"									BLACK RED (REF.)	YELLOW (REF.)	0.100" SHEET ALUMINUM	P8	13'-6"				7'-0"	
50		19A															13'-6"				7'-0"	
57		19															13'-6"				5'-0"	
51	← Airport	19	6'-0"	2'-0"	3"	0.75"	8"	6"		EMOD		TYPE "A"	WHITE (REF.)	GREEN (REF.)	2-12" ALUMINUM EXTRUSIONS	S3X5.7	h_1 = 12'-9" h_2 = 13'-0"	TYPE 5 D=1'-3"	0.18	50.1	5'-0"	
52	Airport →	19	6'-0"	2'-0"	3"	0.75"	8"	6"		EMOD		TYPE "A"	WHITE (REF.)	GREEN (REF.)	2-12" ALUMINUM EXTRUSIONS	S3X5.7	h_1 = 12'-9" h_2 = 13'-0"	TYPE 5 D=1'-3"	0.18	50.1	5'-0"	
54	W11-2 W16-7P	19	36" 24"	36" 12"									BLACK	YELLOW (REF.)	0.100" SHEET ALUMINUM 0.080" SHEET ALUMINUM	P5	11'-6"				7'-0"	REQUIRES SLIP BASE ITEM NO. 713-11.21. SEE STD DWG. T-S-23A.
55	TO INTERSTATE 75 M4-5 M1-1 M3-1 NORTH SOUTH M3-3 TN-6D 153 Tennessee 153 Tennessee TN-6D M6-3 M5-1R M5-4 LEFT LANE RIGHT LANE M5-6	19	24" 24" 24" 30" 21" 24"	12" 24" 12" 24" 15" 18"									WHITE BLACK	BLUE (REF.) WHITE (REF.)	0.080" SHEET ALUMINUM	P5 P6	13'-6" 16'-6"				7'-0"	REQUIRES SLIP BASE ITEM NO. 713-11.21. SEE STD DWG. T-S-23A.
58	NO OUTLET W14-2	19A	30"	30"										YELLOW (REF.)	0.100" SHEET ALUMINUM	P2	13'-0"				5'-0"	
59	SOUTH TO 153 Tennessee 75 Chattanooga RIGHT LANE EXIT ONLY	19	8'-0"	8'-0"	9"	1"	6" 8" 8" 8"	6"		EMOD	30"X24" 24"X24"		WHITE (REF.) BLACK	GREEN (REF.) YELLOW (REF.)	8-12" ALUMINUM EXTRUSIONS	S6X12.5	h_1 = 18'-9" h_2 = 19'-3"	TYPE 5 D=1'-3"	0.18	50.1	7'-0"	
60	153 Tennessee NORTH LEFT LANE	19	7'-0"	4'-0"	9"	1"	6" 8"			EMOD	30"X24"		WHITE (REF.)	GREEN (REF.)	4-12" ALUMINUM EXTRUSIONS	S4X7.7	h_1 = 14'-9" h_2 = 15'-3"	TYPE 5 D=1'-3"	0.18	50.1	7'-0"	
61	SOUTH TO 153 Tennessee 75 Chattanooga RIGHT LANE EXIT ONLY	19	8'-0"	8'-0"	9"	1"	6" 8" 8" 8"	6"		EMOD	30"X24" 24"X24"	TYPE "A" @ 45°	WHITE (REF.) BLACK	GREEN (REF.) YELLOW (REF.)	8-12" ALUMINUM EXTRUSIONS	S6X12.5	h_1 = 18'-9" h_2 = 19'-3"	TYPE 5 D=1'-3"	0.18	50.1	7'-0"	

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	PHSIP-3602(5)	20C

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SEE STD. DWG. NO. T-S-19

SIGN NO	LEGEND		SHEET NO	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
				LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU. YD.	REIN STEEL LBS.		
A	LEFT TURN YIELD ON FLASHING YELLOW	R10-12MOD	21	30"	36"									BLACK YELLOW (REF.)	WHITE (REF.)	0.100" SHEET ALUMINUM							TO BE MOUNTED ON MAST ARM
A			21A																				
B	Airport Connector Rd	D3-1a	21	96"	18"			8" 6"	6" 4"		"D"			WHITE (REF.)	GREEN (REF.)	0.100" SHEET ALUMINUM							TO BE MOUNTED ON MAST ARM REDUCE SPACING TO FIT
B	W Shepherd Rd	D3-1a	21A	78"	18"			8" 6"	6" 4"		"D"			WHITE (REF.)	GREEN (REF.)	0.100" SHEET ALUMINUM							TO BE MOUNTED ON MAST ARM
C	70 SOUTH →	D3-1a	21	78"	18"			8"			"D"	12"X12"		WHITE (REF.)	GREEN (REF.)	0.100" SHEET ALUMINUM							TO BE MOUNTED ON MAST ARM
C	70 NORTH →	D3-1a	21A	78"	18"			8"			"D"	12"X12"		WHITE (REF.)	GREEN (REF.)	0.100" SHEET ALUMINUM							TO BE MOUNTED ON MAST ARM
D	← 70 SOUTH	D3-1a	21	78"	18"			8"			"D"	12"X12"		WHITE (REF.)	GREEN (REF.)	0.100" SHEET ALUMINUM							TO BE MOUNTED ON MAST ARM
D	← 70 NORTH	D3-1a	21A	78"	18"			8"			"D"	12"X12"		WHITE (REF.)	GREEN (REF.)	0.100" SHEET ALUMINUM							TO BE MOUNTED ON MAST ARM
E		R3-2	21	36"	36"									RED (REF.) BLACK	WHITE (REF.)	0.100" SHEET ALUMINUM							TO BE MOUNTED ON MAST ARM
E			21A																				
F		R3-1	21	36"	36"									RED (REF.) BLACK	WHITE (REF.)	0.100" SHEET ALUMINUM							TO BE MOUNTED ON MAST ARM
F			21A																				
G		R10-3e	21	9"	15"									ORANGE (REF.) BLACK	WHITE (REF.)	0.100" SHEET ALUMINUM							TO BE MOUNTED ON MAST ARM
G			21A																				
H		R10-3e	21	9"	15"									ORANGE (REF.) BLACK	WHITE (REF.)	0.100" SHEET ALUMINUM							TO BE MOUNTED ON MAST ARM
H			21A																				

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DEPARTMENT OF TRANSPORTATION

SIGN SCHEDULE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	20
CONST.	2015	PHSIP-3602(5)	21

SIGNAL SUPPORT POLE DATA

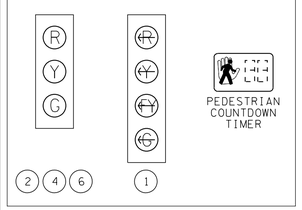
POLE NO.	STATION	OFFSET	NORTHING	EASTING	GROUND ELEV. @ POLE	ARM ELEV.	ARM LENGTH	FOOTING DEPTH
1	106+11.42	L 45.96	259098.52	2211856.57	689.29	709.29	50'	15'
2	106+99.65	R 49.59	259046.50	2211975.48	691.17	711.17	50', 60'	15'

*POLE LENGTHS MUST BE FIELD VERIFIED PRIOR TO FABRICATION

SIGNAL PHASING DIAGRAM

Ø1	Ø2	INACTIVE Ø3	Ø4
INACTIVE Ø5	Ø6	INACTIVE Ø7	INACTIVE Ø8

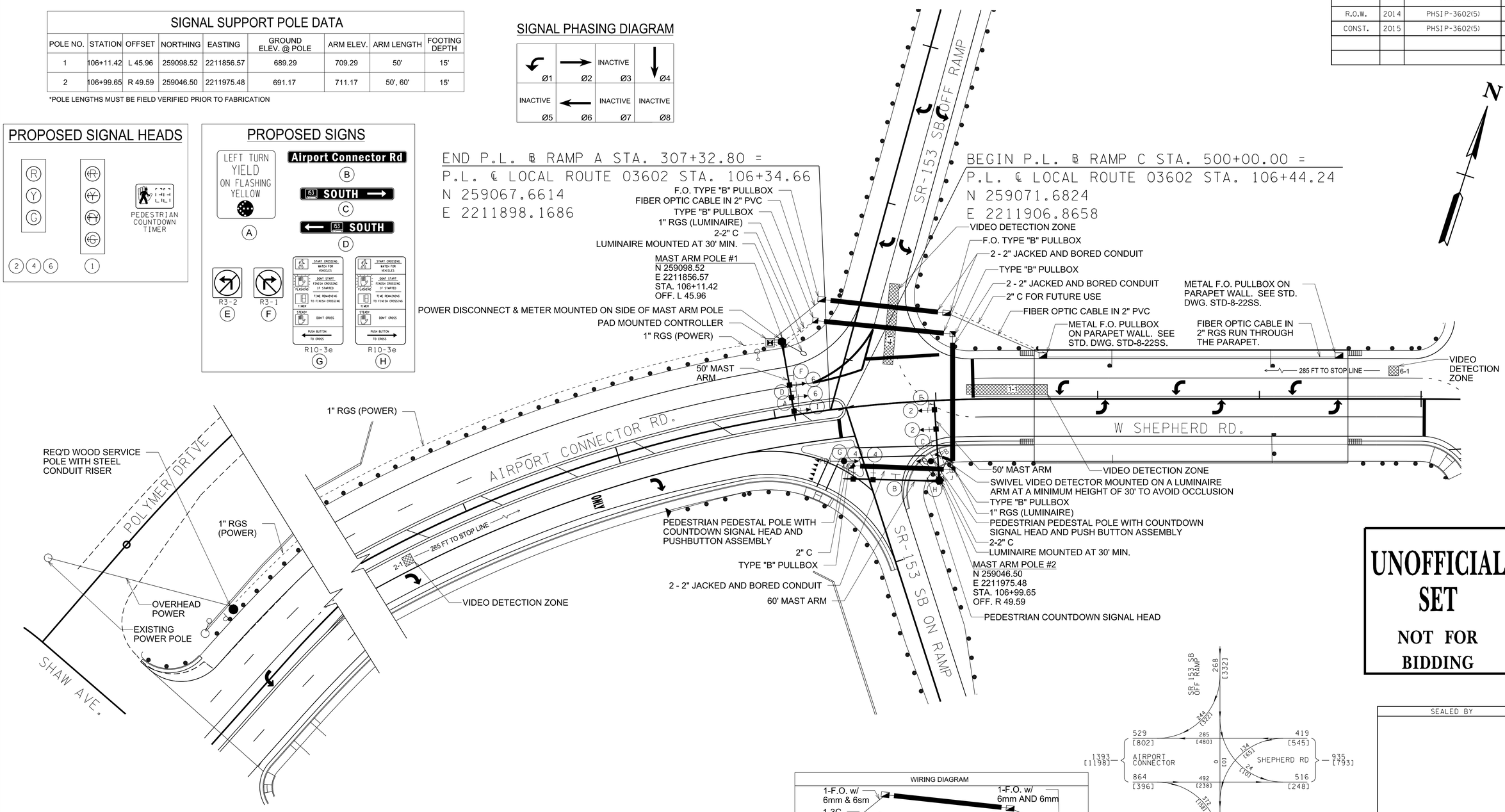
PROPOSED SIGNAL HEADS

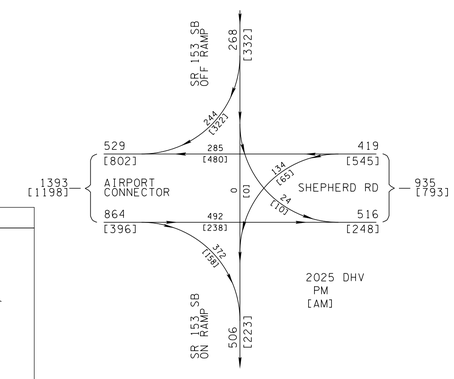


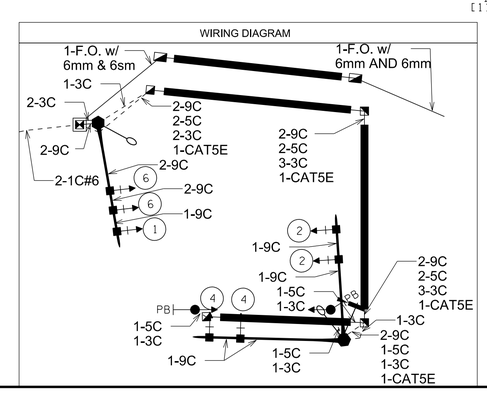
PROPOSED SIGNS

END P.L. ℄ RAMP A STA. 307+32.80 =
P.L. ℄ LOCAL ROUTE 03602 STA. 106+34.66
N 259067.6614
E 2211898.1686

BEGIN P.L. ℄ RAMP C STA. 500+00.00 =
P.L. ℄ LOCAL ROUTE 03602 STA. 106+44.24
N 259071.6824
E 2211906.8658







BASIC OR SEMI-ACTUATED TIMINGS (SECONDS)

PHASE	MINIMUM GREEN	PASSAGE TIME	MAX 1	CLEARANCE YELLOW	CLEARANCE ALL RED	RECALL TO	MEMORY POSITION (1)	LEFT TURN OPERATION (2)
1	6.0	3.0	14	4.0	2.0		NL	P/P
4	19.0	3.0	22	4.0	2.0		L	P

THESE TIMINGS ARE INITIAL AND MAY BE ADJUSTED BY THE CONTRACTOR BASED ON FIELD OBSERVATIONS TO PROVIDE EFFICIENT OPERATION.

(1) NL = NON LOCK
L = LOCK

(2) PERM = PERMITTED
PROT = PROTECTED
P/P = PROT/PERM

VOLUME - DENSITY TIMING (SECONDS)

PHASE	MINIMUM INITIAL	MAXIMUM INITIAL	ADDED INITIAL	INITIAL GAP	TIME BEFORE REDUCTION	TIME TO REDUCE	MINIMUM GAP	MAX 1	CLEARANCE YELLOW	CLEARANCE ALL RED	WALK	FLASHING DON'T WALK	RECALL TO	MEMORY POSITION (1)
2	20	26	2.3	4.3	20.0	20.0	2.0	60	4.0	2.0	7	13	MIN	NL
6	15	26	2.3	4.3	20.0	20.0	2.0	60	4.0	2.0	-	-	MIN	NL

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SEE SHEET 19 FOR SIGNING AND STRIPING DETAILS

0 30 60 90

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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED SIGNAL LAYOUT
SR-153 SB RAMP
@
AIRPORT CONNECTOR RD.

SCALE: 1"=30'

/13/2015 3:3:27 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	20A
CONST.	2015	PHSIP-3602(5)	21A

SIGNAL SUPPORT POLE DATA

POLE NO.	STATION	OFFSET	NORTHING	EASTING	GROUND ELEV. @ POLE	ARM ELEV.	ARM LENGTH	FOOTING DEPTH
1	109+95.78	34.19' LT	259216.94	2212229.36	691.82	711.82	35'	15'
2	110+77.45	34.03' LT	259241.02	2212307.91	689.42	709.42	30', 60'	15'

*POLE LENGTHS MUST BE FIELD VERIFIED PRIOR TO FABRICATION

SIGNAL PHASING DIAGRAM

INACTIVE Ø1	Ø2	INACTIVE Ø3	INACTIVE Ø4
Ø5	Ø6	INACTIVE Ø7	Ø8

BASIC OR SEMI-ACTUATED TIMINGS (SECONDS)

PHASE	MINIMUM GREEN	PASSAGE TIME	MAX 1	CLEARANCE YELLOW	CLEARANCE ALL RED	RECALL TO	MEMORY POSITION (1)	LEFT TURN OPERATION (2)
5	6.0	3.0	14	4.0	2.0		NL	P/P
8	6.0	3.0	14	4.0	2.0		L	P

THESE TIMINGS ARE INITIAL AND MAY BE ADJUSTED BY THE CONTRACTOR BASED ON FIELD OBSERVATIONS TO PROVIDE EFFICIENT OPERATION.

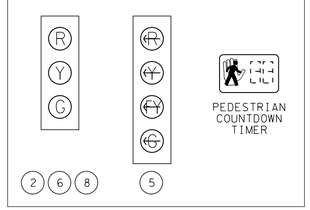
(1) NL = NON LOCK
L = LOCK

(2) PERM = PERMITTED
PROT = PROTECTED
P/P = PROT/PERM

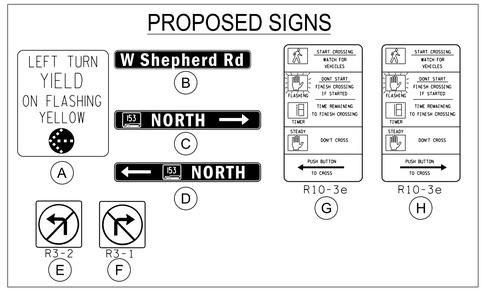
VOLUME - DENSITY TIMING (SECONDS)

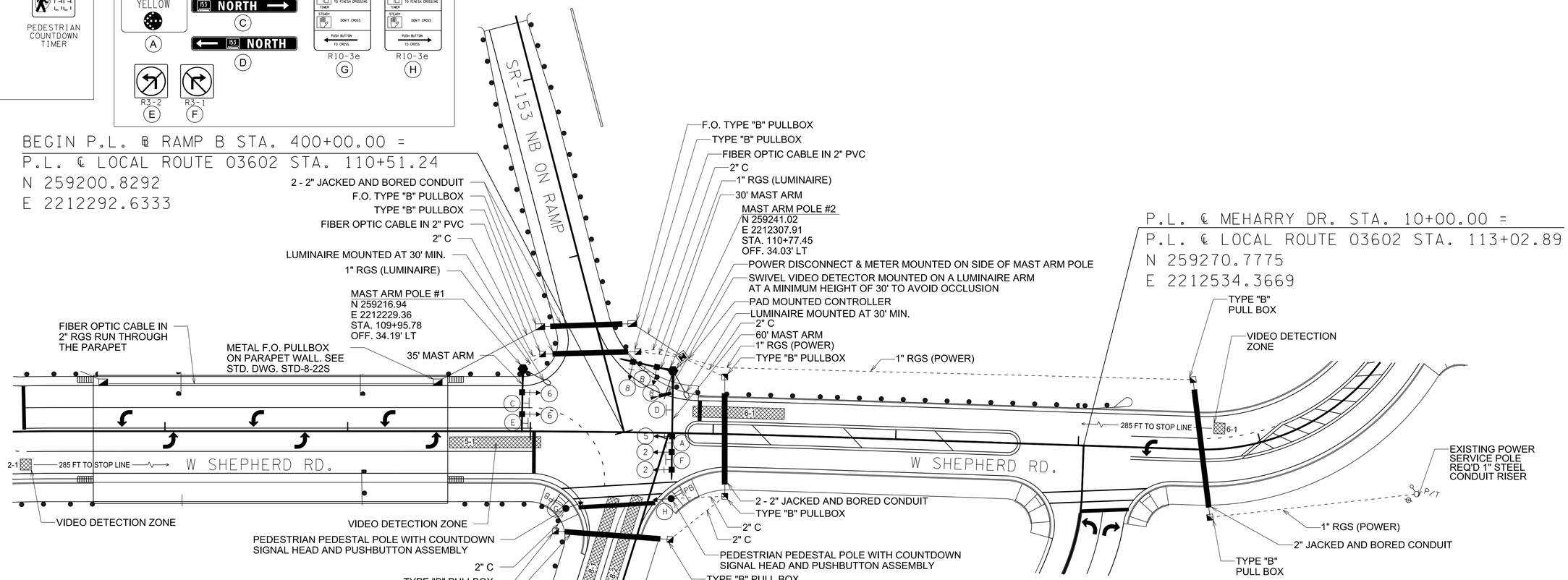
PHASE	MINIMUM INITIAL	MAXIMUM INITIAL	ADDED INITIAL	INITIAL GAP	TIME BEFORE REDUCTION	TIME TO REDUCE	MINIMUM GAP	MAX 1	CLEARANCE YELLOW	CLEARANCE ALL RED	WALK	FLASHING DON'T WALK	RECALL TO	MEMORY POSITION (1)
2	24	26	2.3	4.3	20.0	20.0	2.0	60	4.0	2.0	7	13	MIN	NL
6	15	26	2.3	4.3	20.0	20.0	2.0	60	4.0	2.0	-	-	MIN	NL

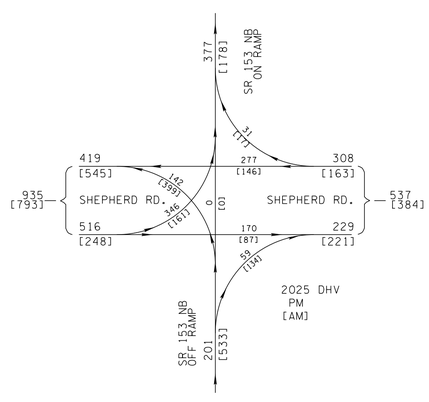
PROPOSED SIGNAL HEADS

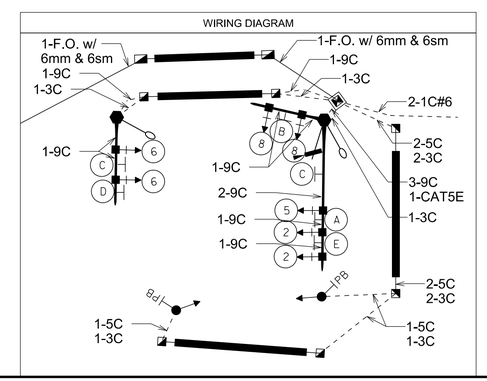


PROPOSED SIGNS









SEE SHEET 19 FOR SIGNING AND STRIPING DETAILS

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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED SIGNAL LAYOUT
SR-153 NB OFF RAMP
@
W SHEPHERD RD.

SCALE: 1"=30'

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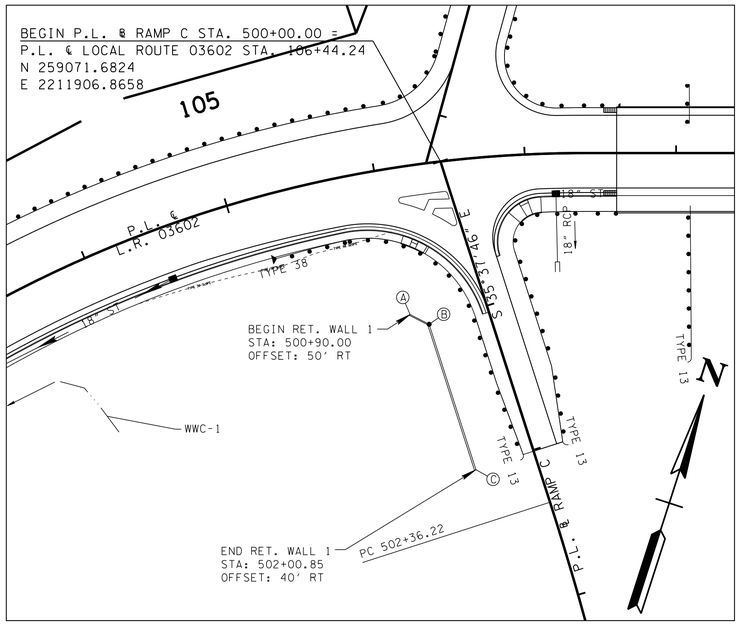
PROJECT NO.	YEAR	SHEET NO.
PHSIP-3602(5)	2015	22

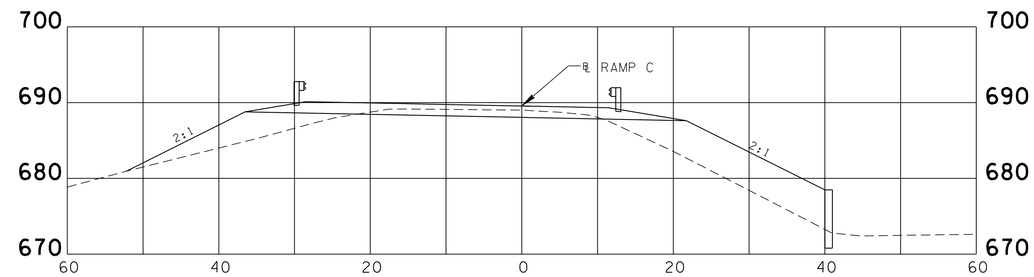
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

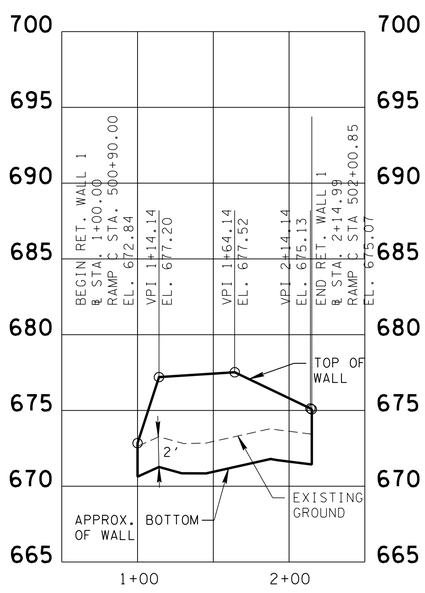


PLAN VIEW - WALL #1

SCALE: 1" = 50'



TYPICAL SECTION - WALL #1



PROFILE - WALL #1

SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
604-07.01	RETAINING WALL (NO. 1)	S.F.	617

NOTE:
THE RETAINING WALL PAY QUANTITY IS BASED ON THE SURFACE AREA BETWEEN THE TOP OF WALL AND 2' BELOW THE EXISTING GROUND LINE.

WALL #1 STAKEOUT POINTS

RAMP C STATION	RET. WALL #1 BL STATION	N	E	RAMP C CL OFFSET	TOP OF WALL ELEV.	EXIST. GROUND ELEV.
500+90	1+00	258969.4032	2211918.6544	50' RT	672.84	672.63
501+00	1+14.14	258967.1006	2211932.6078	40' RT	677.20	673.27
501+50	1+64.14	258926.4605	2211961.7348	40' RT	677.52	673.27
502+00	2+14.14	258885.8204	2211990.8618	40' RT	675.13	673.45
502+00.85	2+14.99	258885.1295	2211991.3570	40' RT	675.07	673.44

WALL #1 ALIGNMENT

RET. WALL #1 BL STATION	CODE	RAMP C STATION	N	E	RAMP C CL OFFSET	FROM - TO	BEARING	LENGTH
1+00	A	500+90	258969.4032	2211918.6544	50' RT	A - B	S80°37'46"E	14.14'
1+14.14	B	501+00	258967.1006	2211932.6078	40' RT	B - C	S35°37'46"E	100.85'
2+14.99	C	502+00.85	258885.1295	2211991.3570	40' RT			

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RETAINING WALL
CONCEPTUAL DRAWING
WALL NO. 1 (SHEET 1 OF 1)
STATE ROUTE 7 (US-31)
HAMILTON COUNTY
2014

DESIGNED BY _____ DATE _____
DRAWN BY _____ DATE _____
SUPERVISED BY _____ DATE _____
CHECKED BY _____ DATE _____

CORRECT _____
ENGINEER OF STRUCTURES

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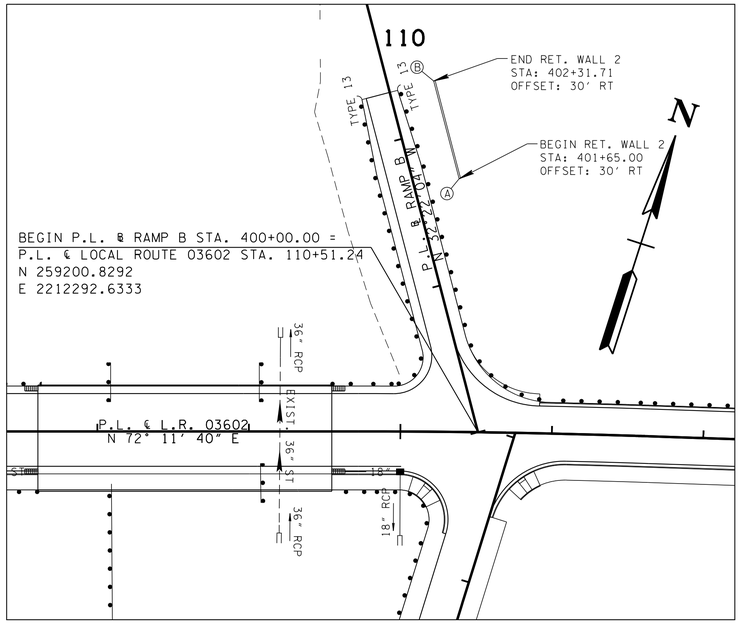
PROJECT NO.	YEAR	SHEET NO.
PHSIP-3602(5)	2015	23

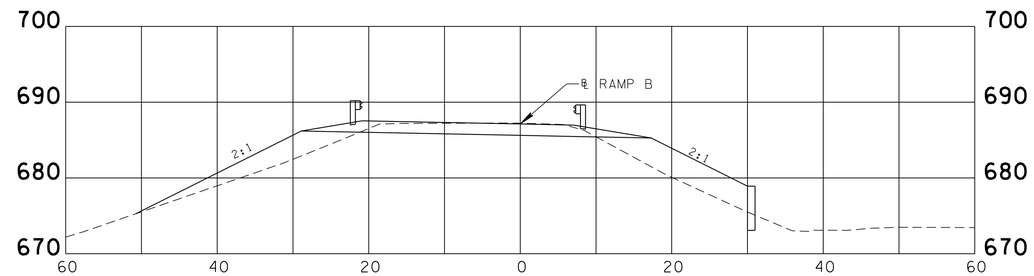
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

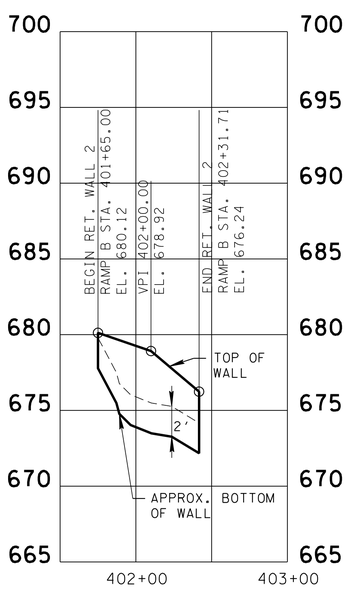


PLAN VIEW - WALL #2

SCALE: 1" = 50'



TYPICAL SECTION - WALL #2



PROFILE - WALL #2 (ALONG RAMP B)

SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
604-07.01	RETAINING WALL (NO. 2)	S.F.	305

NOTE:
THE RETAINING WALL PAY QUANTITY IS BASED ON THE SURFACE AREA BETWEEN THE TOP OF WALL AND 2' BELOW THE EXISTING GROUND LINE.

WALL #2 STAKEOUT POINTS					
RAMP B STATION	N	E	RAMP B CL OFFSET	TOP OF WALL ELEV.	EXIST. GROUND ELEV.
401+65	259356.2536	2212229.6390	30' RT	680.12	679.78
402+00	259385.8156	2212210.9017	30' RT	678.92	675.50
402+31.71	259412.5987	2212193.9256	30' RT	676.24	674.17

WALL #2 ALIGNMENT							
CODE	RAMP B STATION	N	E	RAMP B CL OFFSET	FROM - TO	BEARING	LENGTH
A	401+65	259356.2536	2212229.6390	30' RT	A - B	N32°22'4"W	66.71'
B	402+31.71	259412.5987	2212193.9256	30' RT			

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DEPARTMENT OF TRANSPORTATION

RETAINING WALL
CONCEPTUAL DRAWING
WALL NO. 2 (SHEET 1 OF 1)
STATE ROUTE 7 (US-31)
HAMILTON COUNTY
2014

DESIGNED BY _____ DATE _____
DRAWN BY _____ DATE _____
SUPERVISED BY _____ DATE _____
CHECKED BY _____ DATE _____

CORRECT _____
ENGINEER OF STRUCTURES

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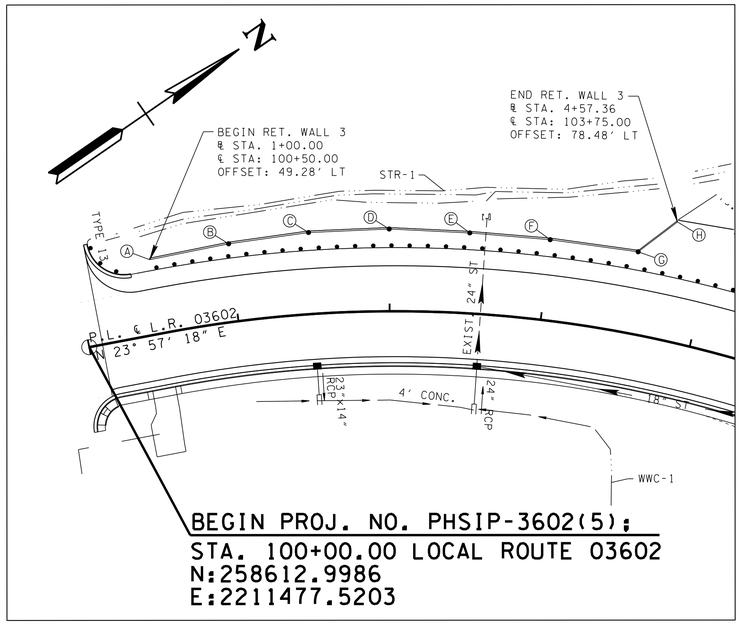
PROJECT NO.	YEAR	SHEET NO.
PHSIP-3602(5)	2015	24

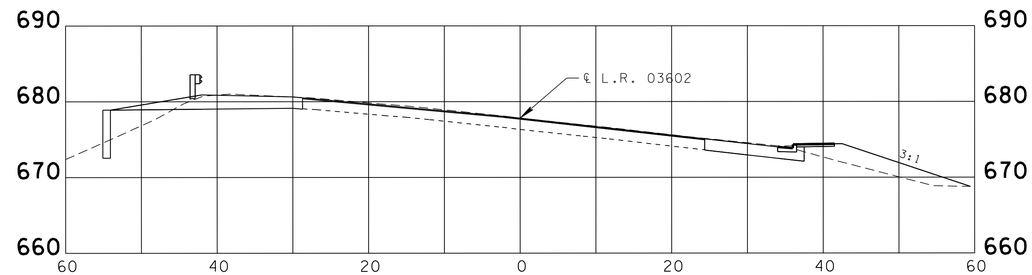
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

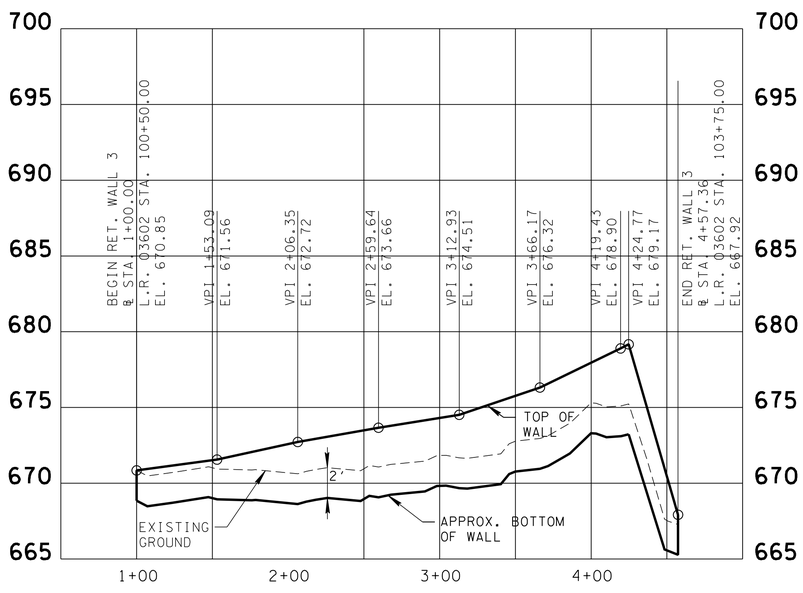


PLAN VIEW - WALL #3

SCALE: 1" = 50'



TYPICAL SECTION - WALL #3



PROFILE - WALL #3

SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
604-07.01	RETAINING WALL (NO. 3)	S.F.	1534

NOTE:
THE RETAINING WALL PAY QUANTITY IS BASED ON THE SURFACE AREA BETWEEN THE TOP OF WALL AND 2' BELOW THE EXISTING GROUND LINE.

WALL #3 STAKEOUT POINTS

L.R. 03602 STATION	RET. WALL #3 BL STATION	N	E	L.R. 03602 CL OFFSET	TOP OF WALL ELEV.	EXIST. GROUND ELEV.
100+50	1+00	258678.7005	2211452.7862	49.28' LT	670.85	670.85
101+00	1+53.09	258727.4598	2211473.7890	51.48' LT	671.56	670.94
101+50	2+06.35	258775.0595	2211497.6816	53.82' LT	672.72	670.63
102+00	2+59.64	258820.1555	2211526.0842	54.26' LT	673.66	671.07
102+50	3+12.93	258862.4464	2211558.4971	53.06' LT	674.51	671.67
103+00	3+66.17	258903.5337	2211592.3529	53.24' LT	676.32	672.96
103+55	4+24.77	258946.7223	2211631.9611	54.09' LT	679.17	675.23
103+75	4+57.36	258979.2881	2211630.5529	78.48' LT	667.92	667.28

WALL #3 ALIGNMENT

L.R. 03602 STATION	CODE	RET. WALL #3 BL STATION	N	E	L.R. 03602 CL OFFSET	FROM - TO	BEARING	LENGTH
100+50	A	1+00	258678.7005	2211452.7862	49.28' LT	A - B	S23°18'13"W	53.09'
101+00	B	1+53.09	258727.4598	2211473.7890	51.48' LT	B - C	S26°39'15"W	53.26'
101+50	C	2+06.35	258775.0595	2211497.6816	53.82' LT	C - D	S32°12'14"W	53.30'
102+00	D	2+59.64	258820.1555	2211526.0842	54.26' LT	D - E	S37°28'3"W	53.28'
102+50	E	3+12.93	258862.4464	2211558.4971	53.06' LT	E - F	S39°29'18"W	53.24'
103+00	F	3+66.17	258903.5337	2211592.3529	53.24' LT	F - G	S42°31'26"W	58.60'
103+55	G	4+24.77	258946.7223	2211631.9611	54.09' LT	G - H	N2°28'34"W	32.60'
103+75	H	4+57.36	258979.2881	2211630.5529	78.48' LT			

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DEPARTMENT OF TRANSPORTATION

RETAINING WALL
CONCEPTUAL DRAWING
WALL NO. 3 (SHEET 1 OF 1)
STATE ROUTE 7 (US-31)
HAMILTON COUNTY
2014

DESIGNED BY _____ DATE _____
DRAWN BY _____ DATE _____
SUPERVISED BY _____ DATE _____
CHECKED BY _____ DATE _____

CORRECT _____
ENGINEER OF STRUCTURES

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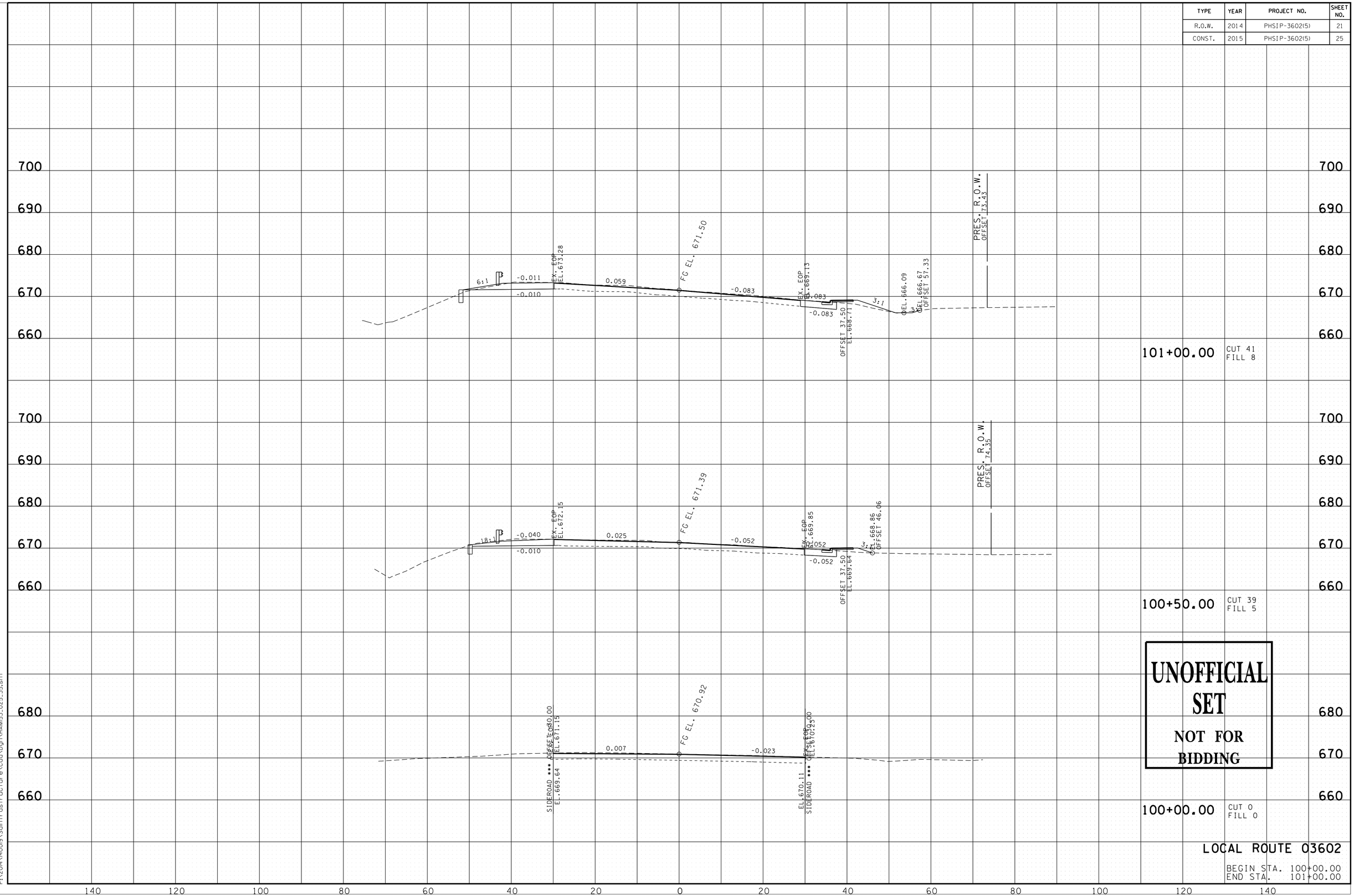
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	21
CONST.	2015	PHSIP-3602(5)	25



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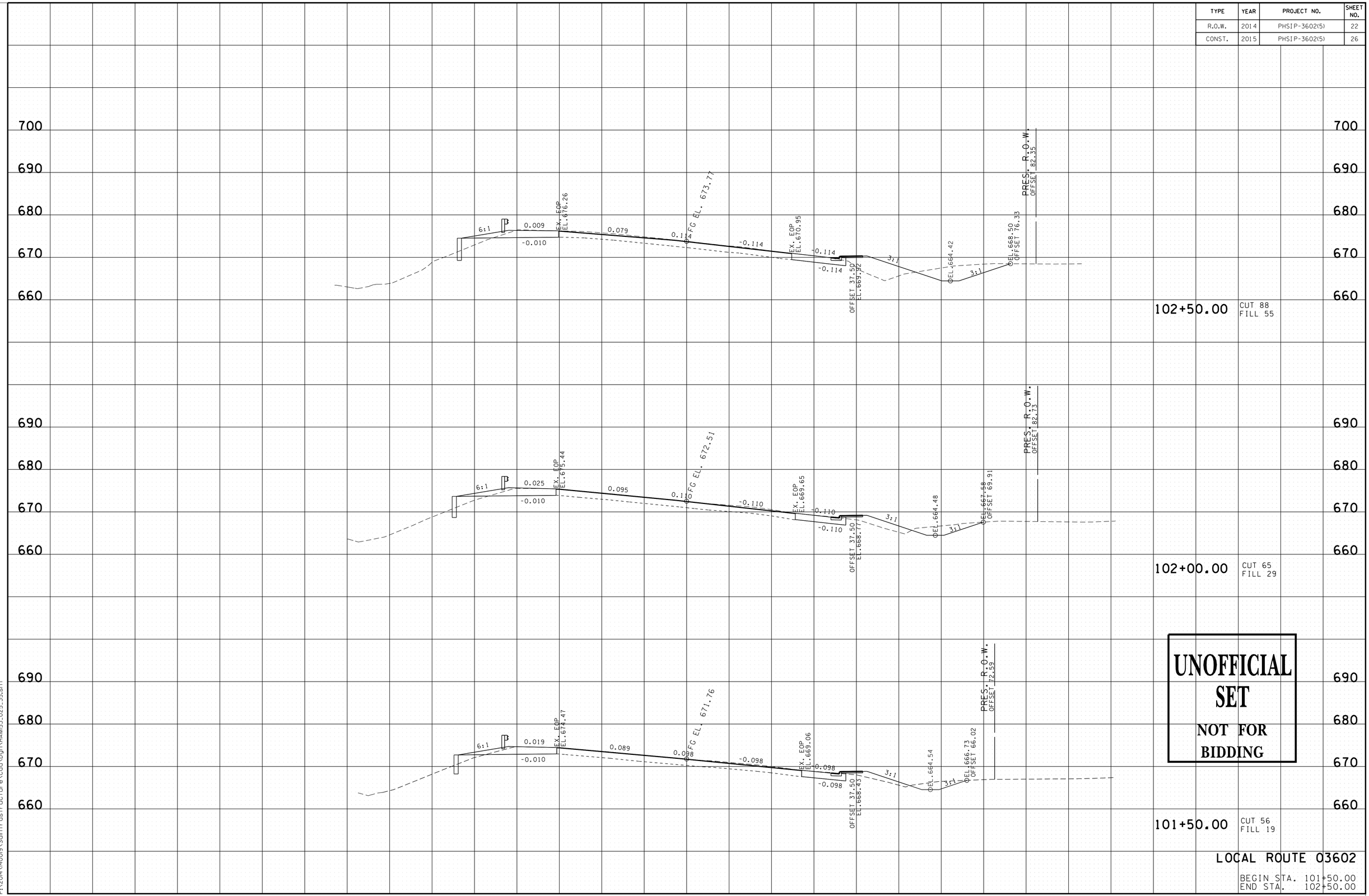
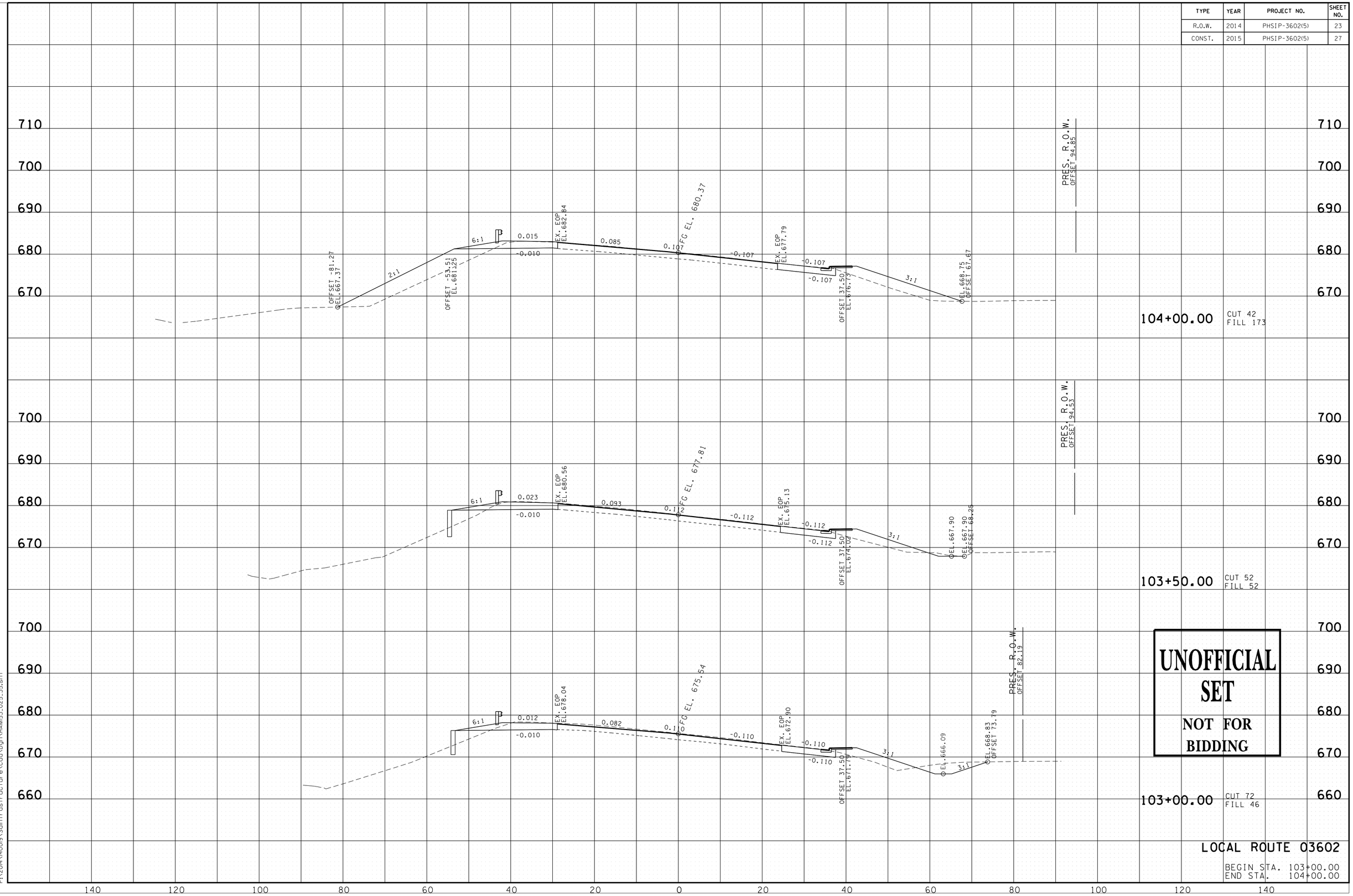
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	22
CONST.	2015	PHSIP-3602(5)	26



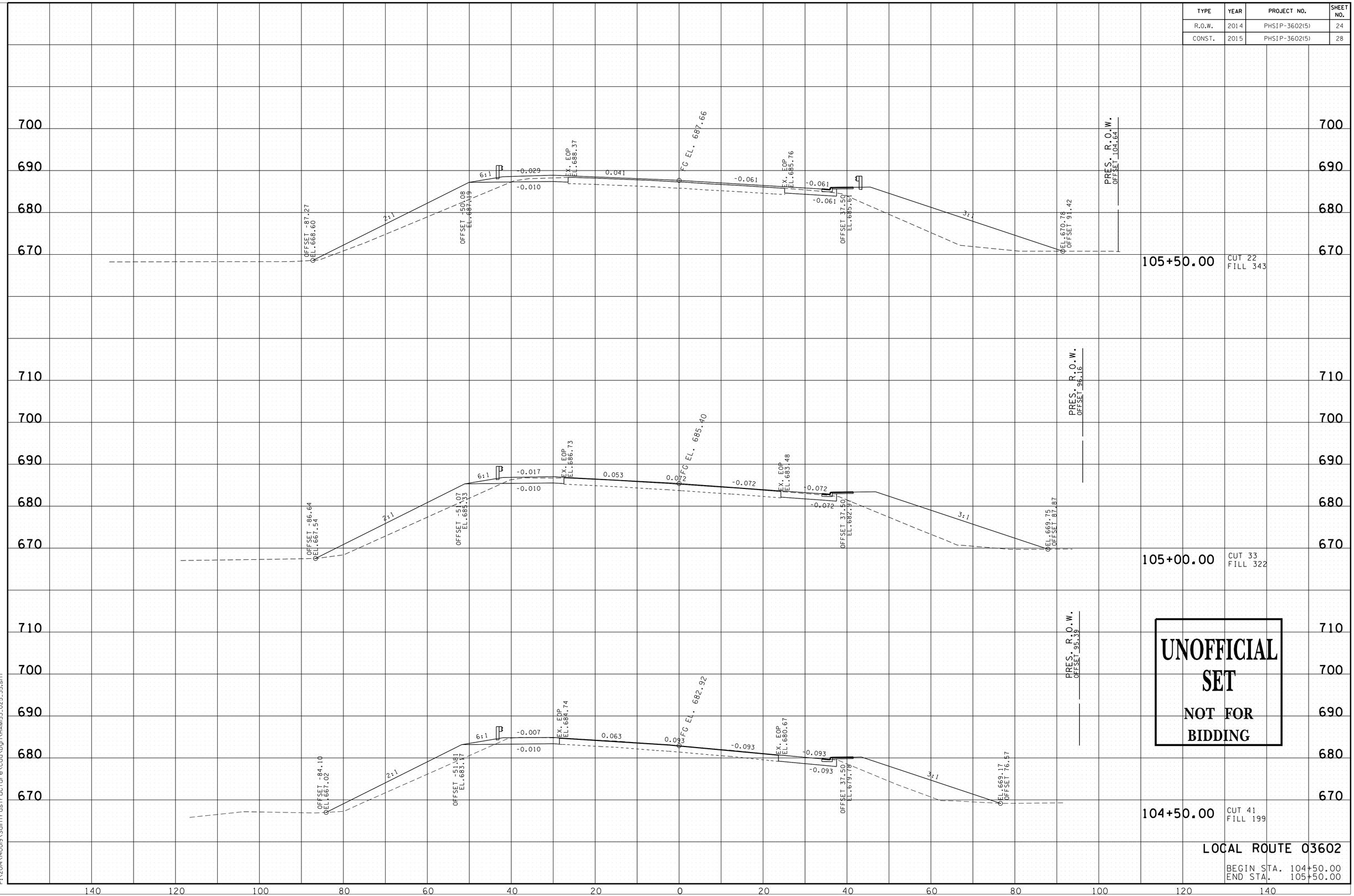
1/14/2015 10:18:33 AM
P:\2014\140019\Salnfrastructure\Cad\Dgn\HAM153.025.35.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	23
CONST.	2015	PHSIP-3602(5)	27



1/14/2015 10:19:01 AM
P:\2014\140019\Sainfrastructure\Cad\Dgn\HAM153.025.35.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	24
CONST.	2015	PHSIP-3602(5)	28

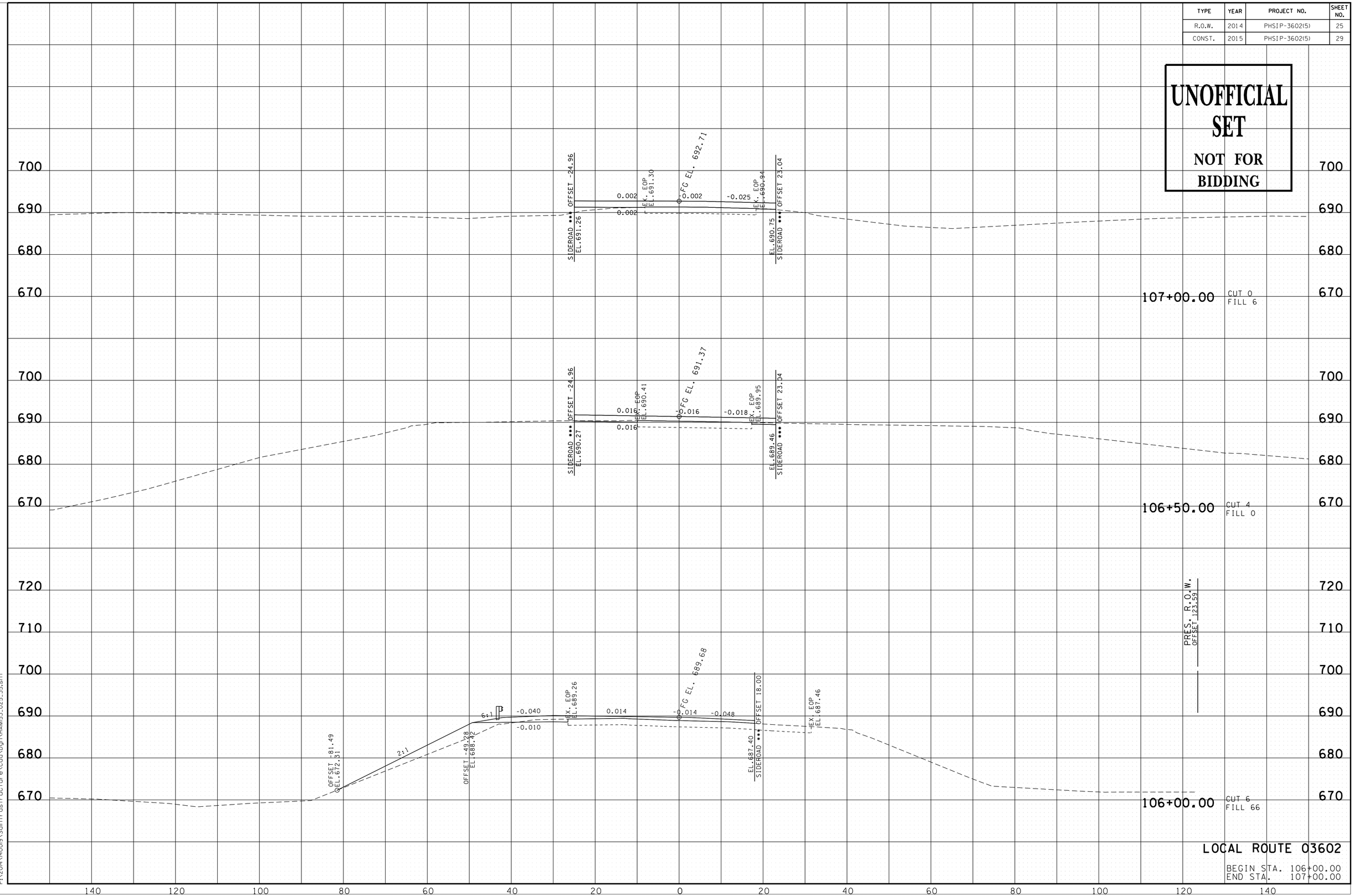


1/14/2015 10:19:28 AM
P:\2014\40019\Saintfrastructure\Cad\Dgn\HAM53.025.35.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	25
CONST.	2015	PHSIP-3602(5)	29

UNOFFICIAL SET

NOT FOR BIDDING

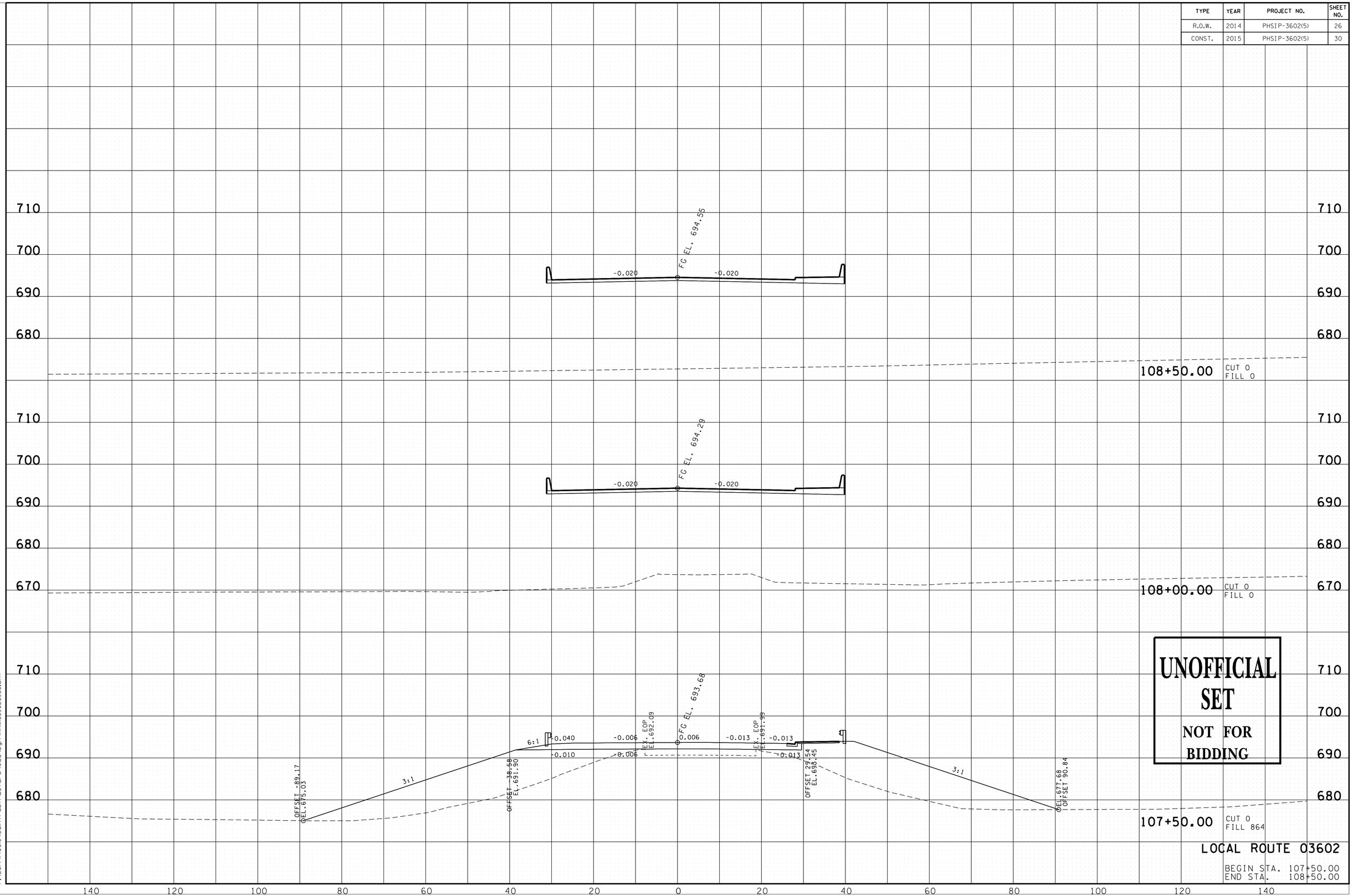


LOCAL ROUTE 03602

BEGIN STA. 106+00.00
END STA. 107+00.00

1/14/2015 10:19:54 AM
P:\2014\14009\Solnfrastructure\Cad\Dgn\HAM153_025_35.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	26
CONST.	2015	PHSIP-3602(5)	30



UNOFFICIAL SET

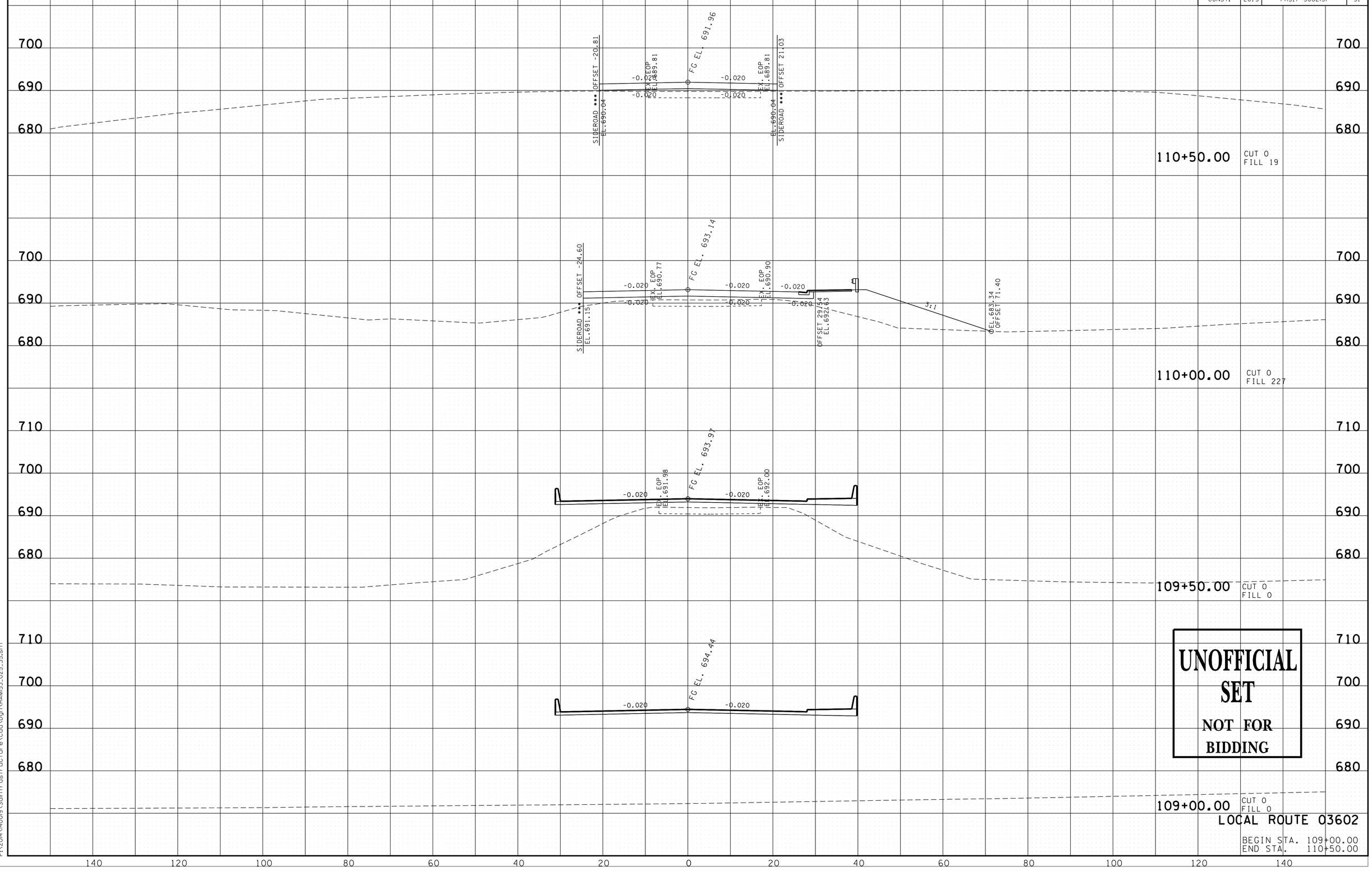
NOT FOR BIDDING

LOCAL ROUTE 03602

BEGIN STA. 107+50.00
END STA. 108+50.00

1/15/2015 8:43:16 AM
P:\2014\40019\Saintfrastructure\Cad\Dgn\HAM53.025.35.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	27
CONST.	2015	PHSIP-3602(5)	31



UNOFFICIAL SET

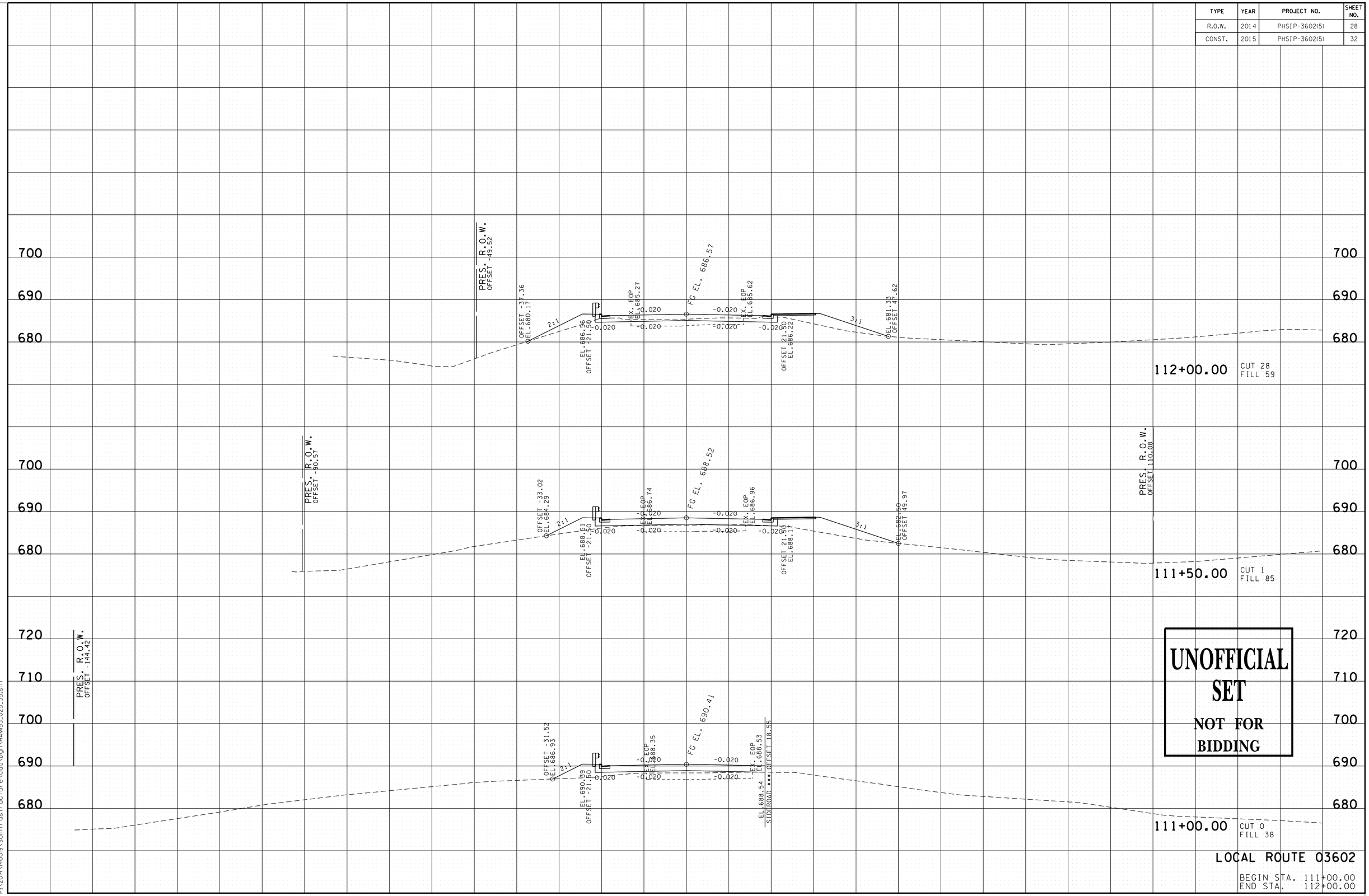
NOT FOR BIDDING

LOCAL ROUTE 03602

BEGIN STA. 109+00.00
END STA. 110+50.00

1/14/2015 10:20:46 AM
P:\2014\40019\Sainfrastructure\Cad\Dgn\HAM53.025.35.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	28
CONST.	2015	PHSIP-3602(5)	32

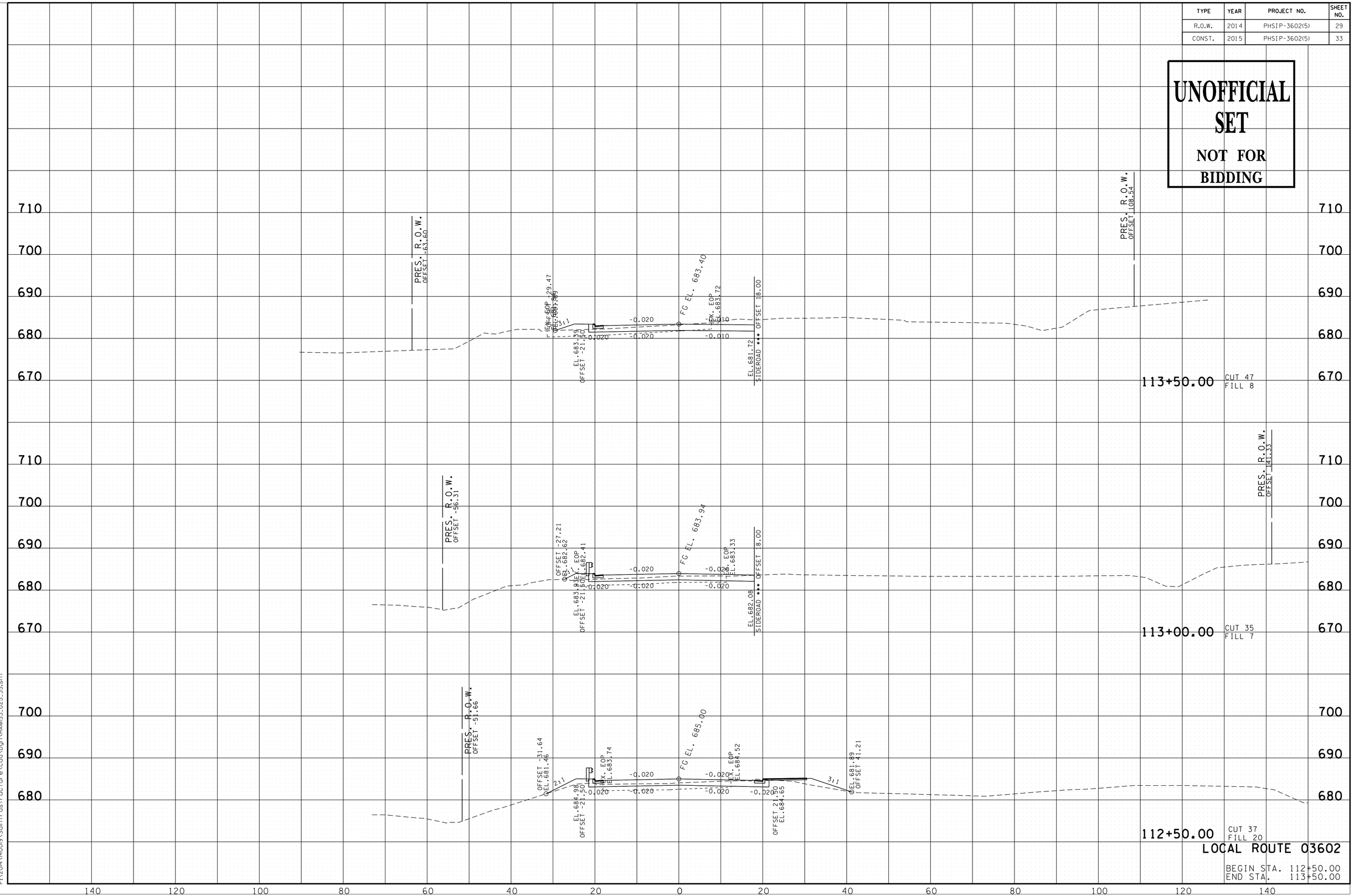


1/14/2015 10:21:49 AM
P:\2014\140019\Salnfrastructure\Cad\Dgn\HAM53.025.35.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	29
CONST.	2015	PHSIP-3602(5)	33

UNOFFICIAL SET

NOT FOR BIDDING

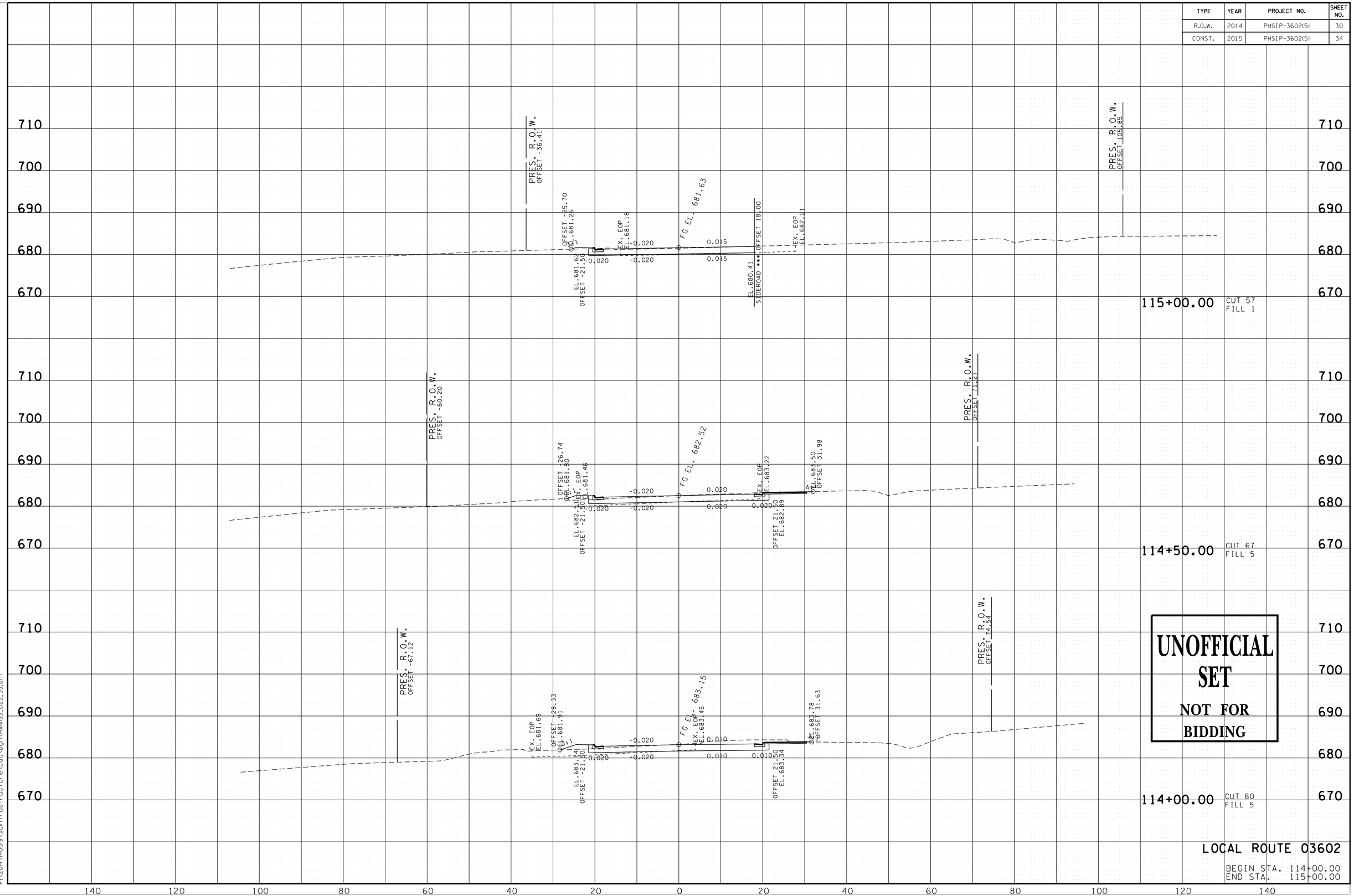


LOCAL ROUTE 03602

BEGIN STA. 112+50.00
END STA. 113+50.00

1/14/2015 10:22:13 AM
P:\2014\40019\Saintfrastructure\Cad\Dgn\HAM53.025.35.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	30
CONST.	2015	PHSIP-3602(5)	34



UNOFFICIAL SET

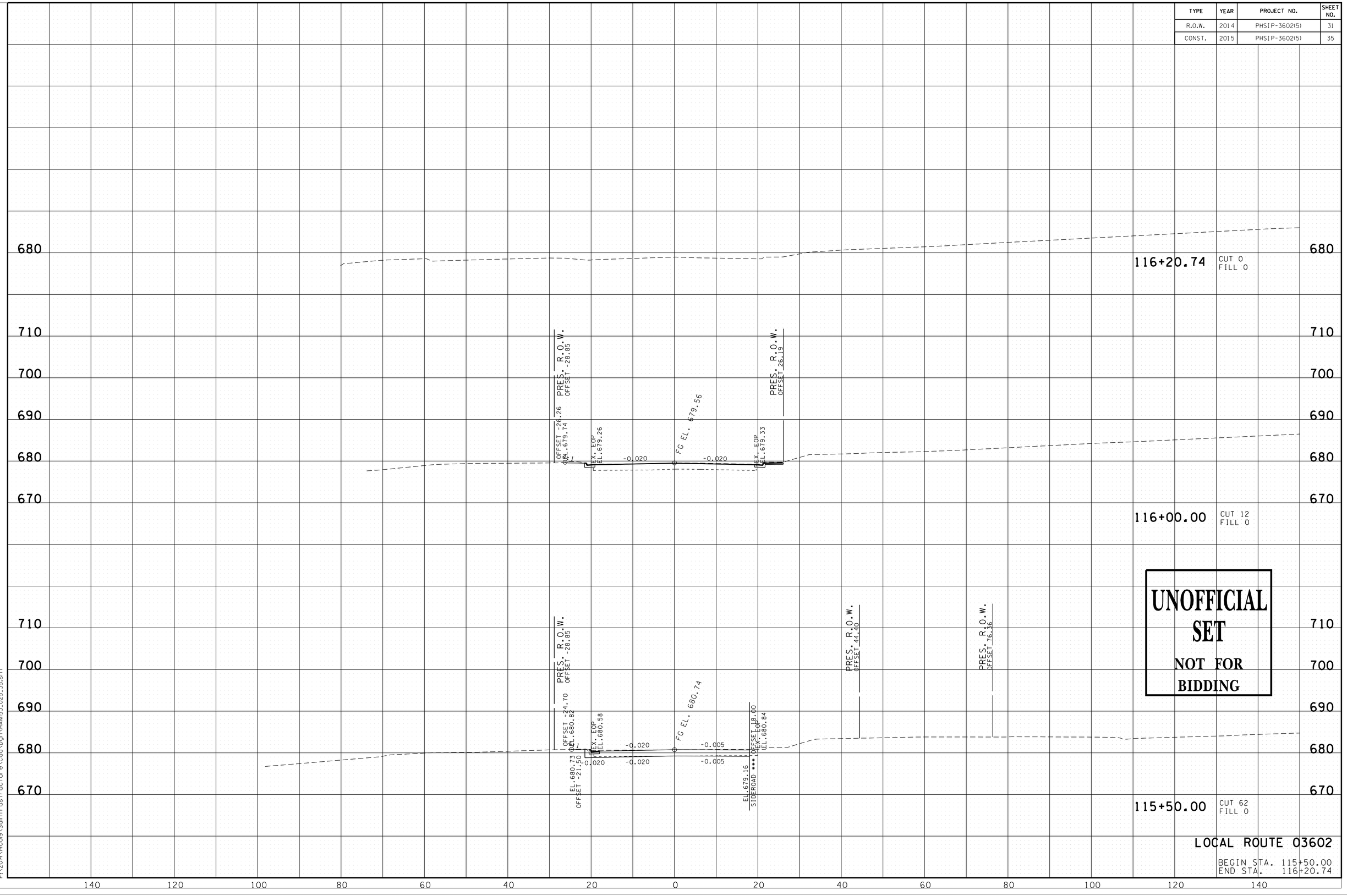
NOT FOR BIDDING

LOCAL ROUTE 03602

BEGIN STA. 114+00.00
END STA. 115+00.00

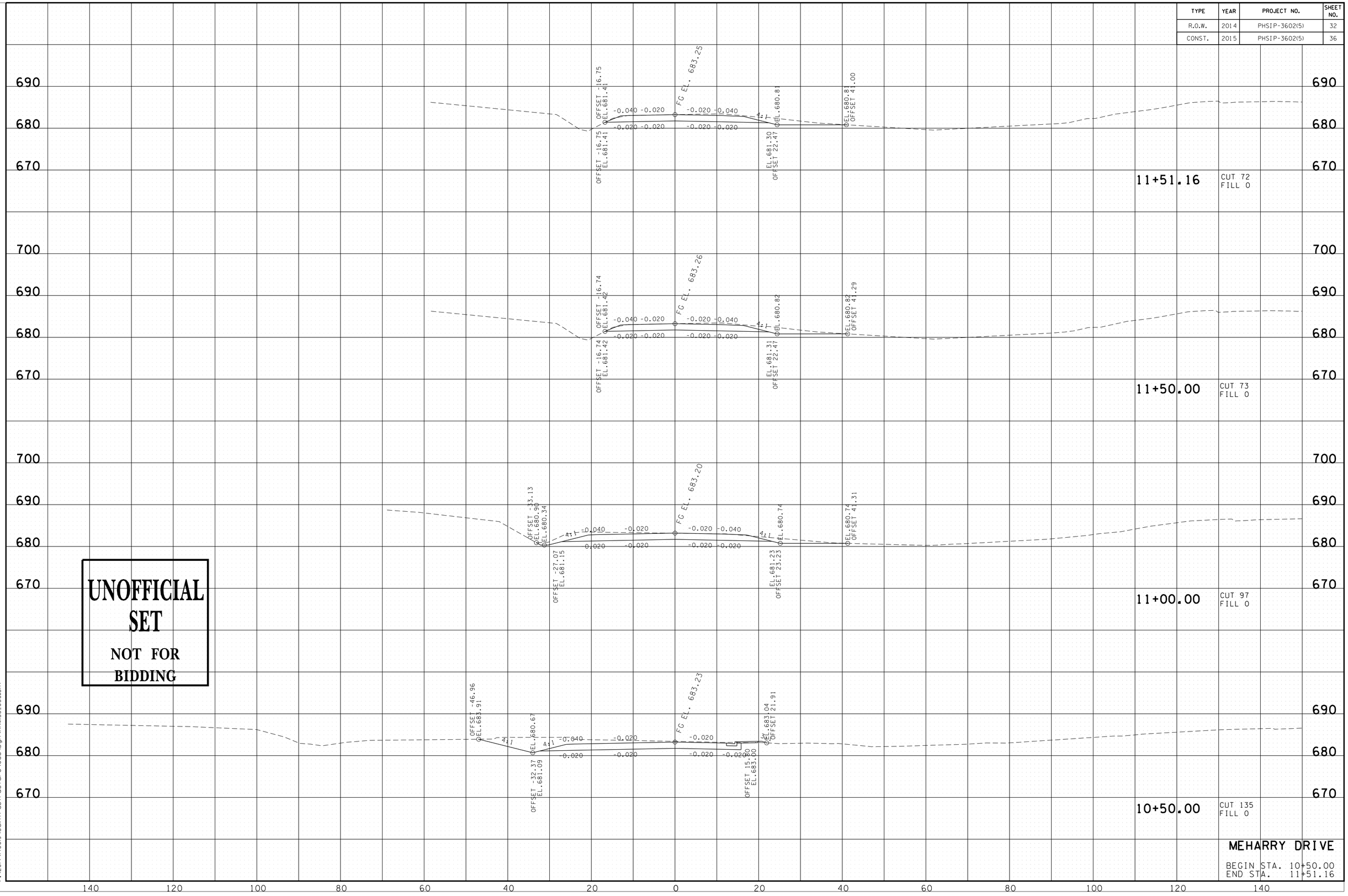
1/14/2015 10:22:44 AM
P:\2014\40019\Sainfrastructure\Cad\Dgn\HAM53.025.35.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	31
CONST.	2015	PHSIP-3602(5)	35



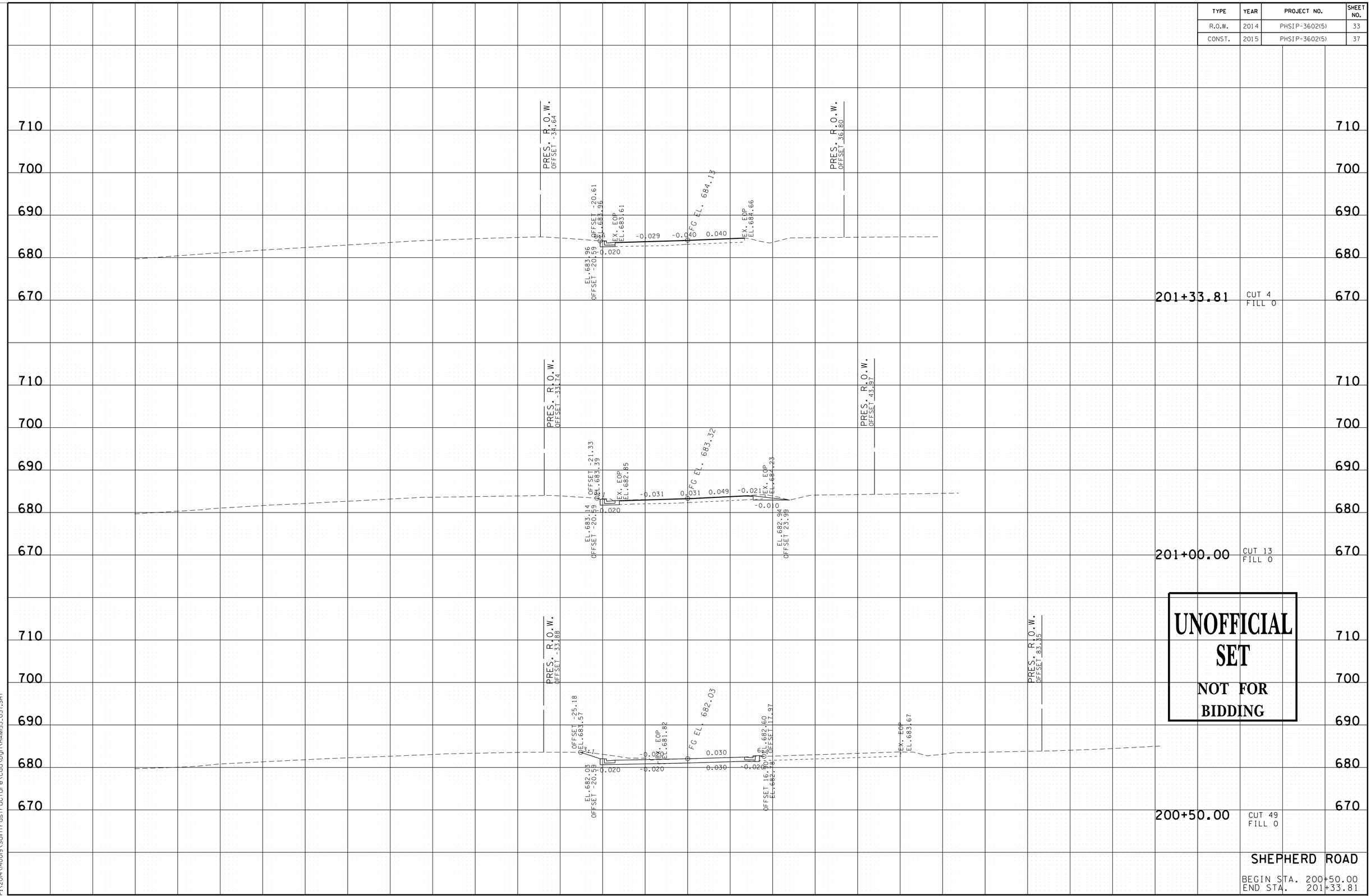
1/15/2015 7:09:17 AM
P:\2014\140019\Sainfrastructure\Cad\Dgn\HAM153.025.35.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	32
CONST.	2015	PHSIP-3602(5)	36



1/15/2015 7:10:04 AM
P:\2014\40019\Sainfrastructure\Cad\Dgn\HAM53_036.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	33
CONST.	2015	PHSIP-3602(5)	37



UNOFFICIAL SET

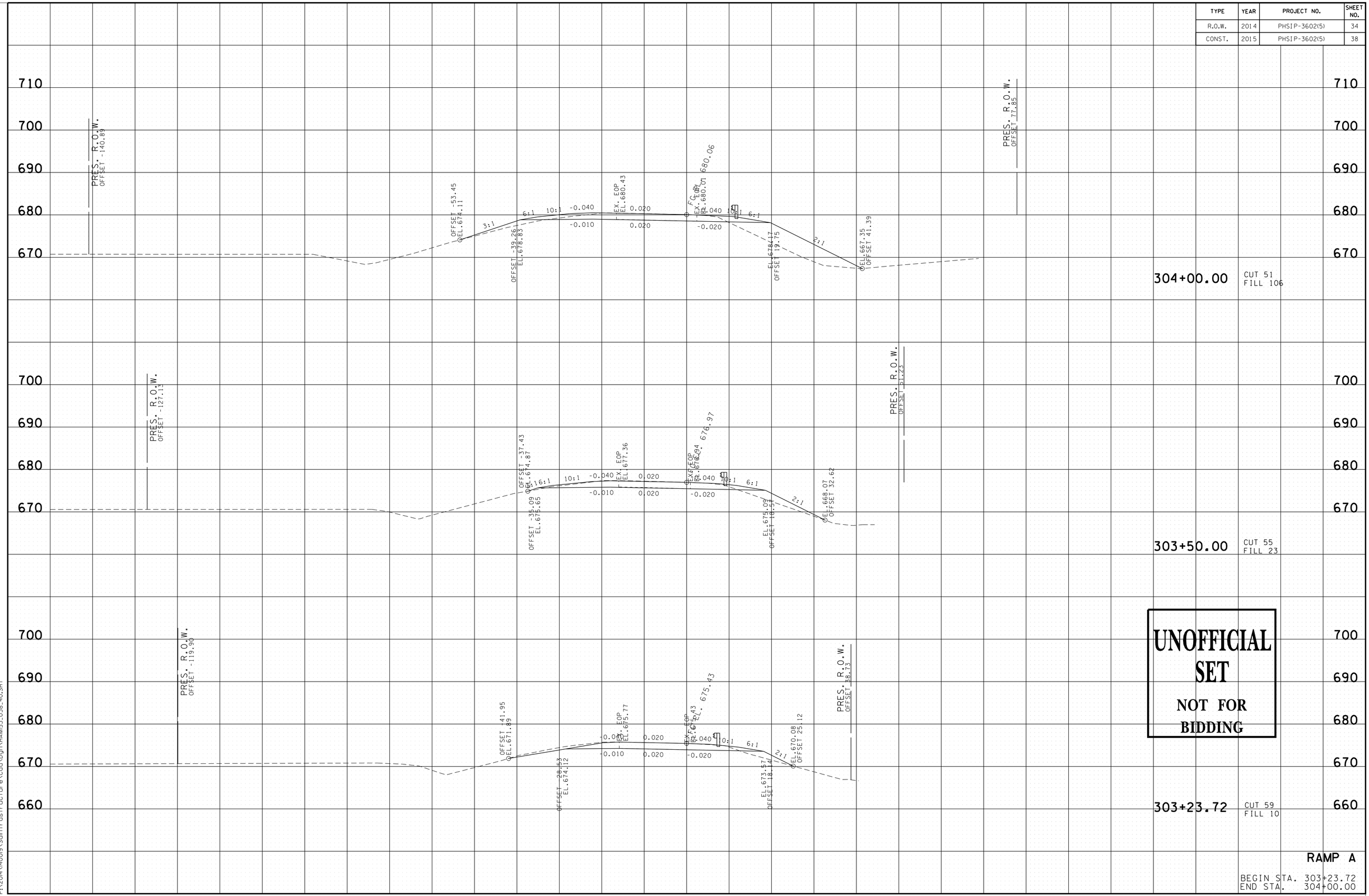
NOT FOR BIDDING

SHEPHERD ROAD

BEGIN STA. 200+50.00
END STA. 201+33.81

1/15/2015 7:10:41 AM
P:\2014\40019\Salnfrastructure\Cad\Dgn\HAM53.037.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	34
CONST.	2015	PHSIP-3602(5)	38



UNOFFICIAL SET

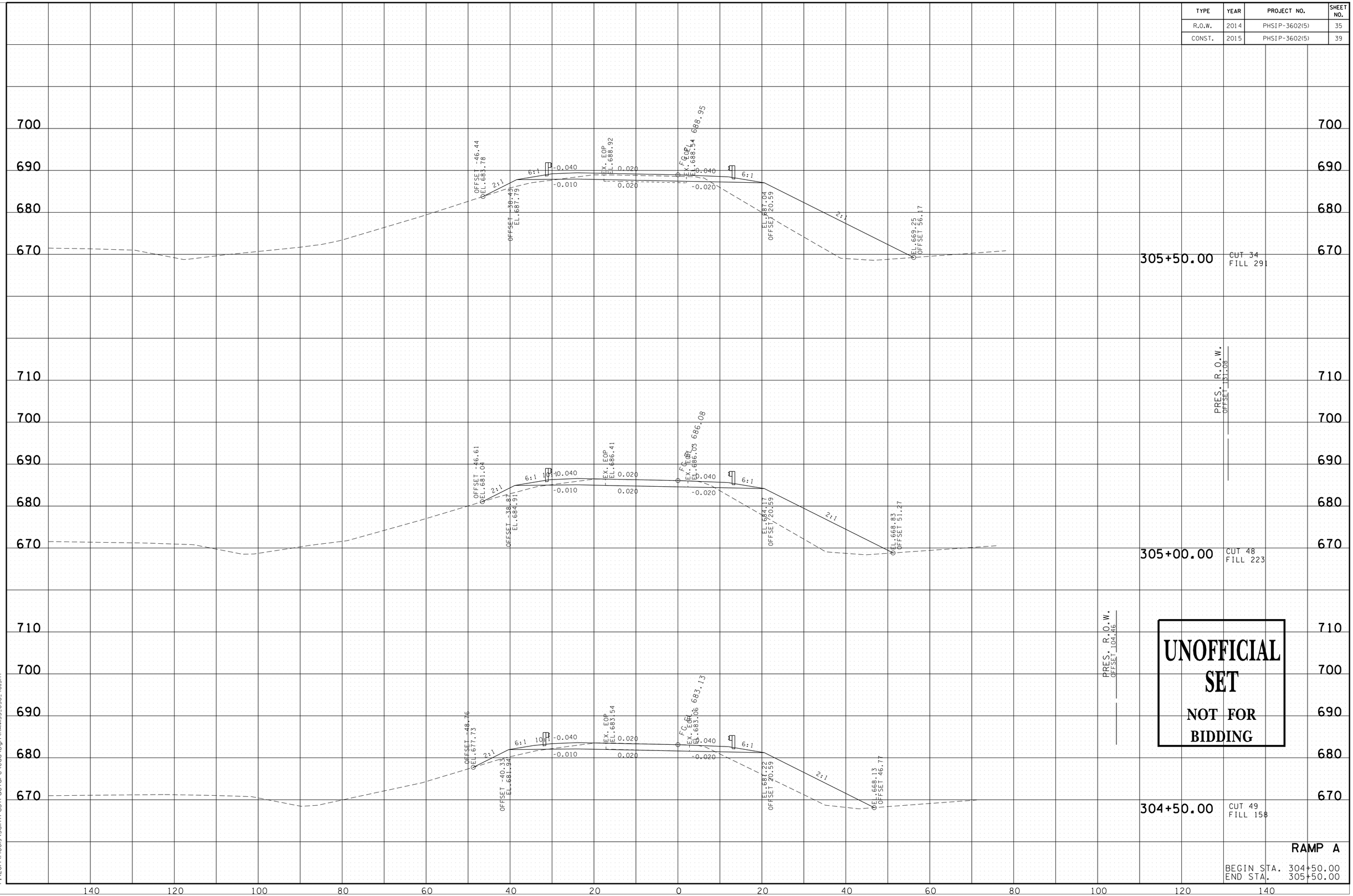
NOT FOR BIDDING

RAMP A

BEGIN STA. 303+23.72
END STA. 304+00.00

1/15/2015 7:41:24 AM
P:\2014\140019\Sainfrastructure\Cad\Dgn\HAM153_038_40.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	35
CONST.	2015	PHSIP-3602(5)	39



UNOFFICIAL SET

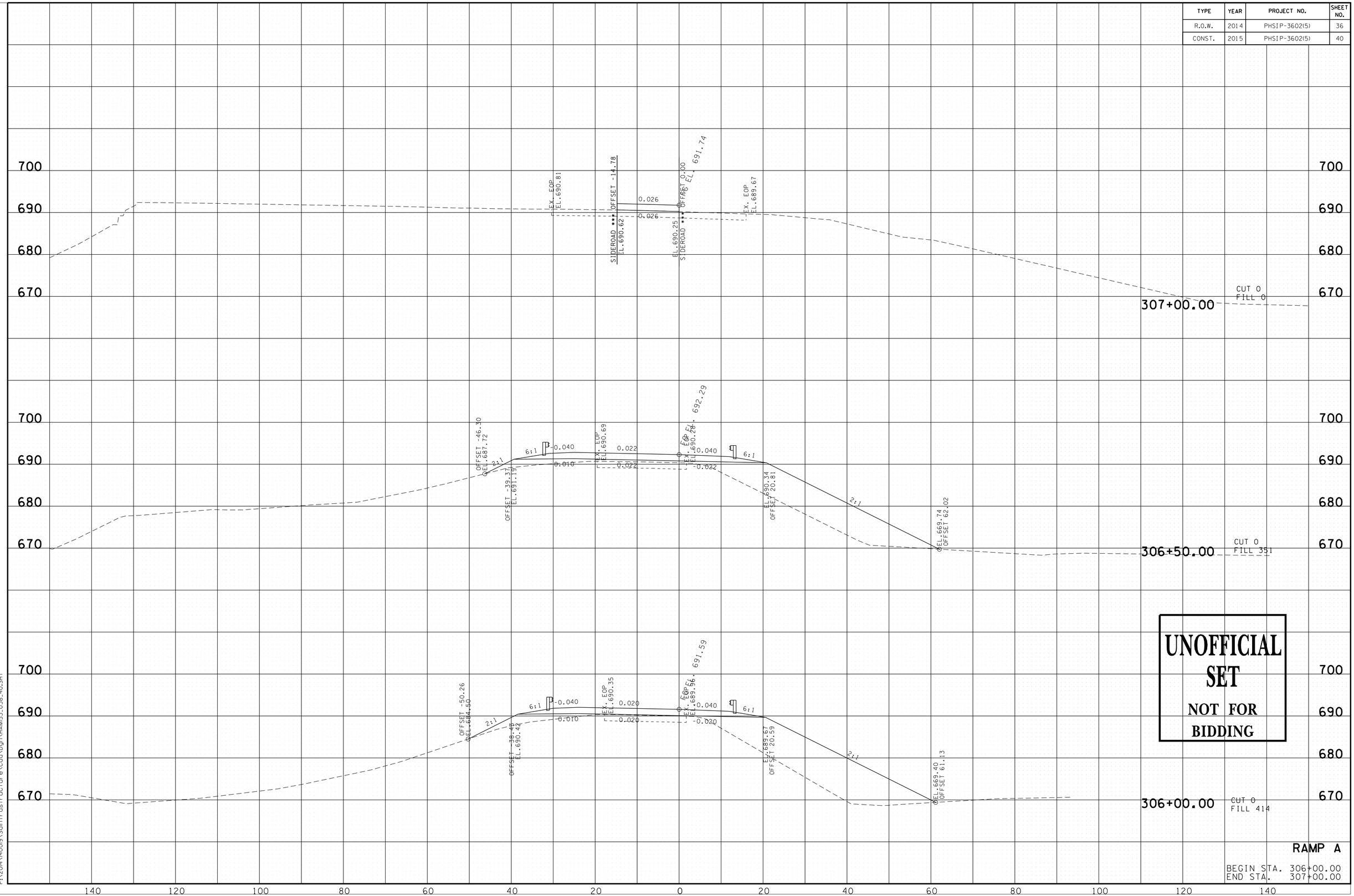
NOT FOR BIDDING

RAMP A

BEGIN STA. 304+50.00
END STA. 305+50.00

1/15/2015 7:13:24 AM
P:\2014\140019\Sainfrastructure\Cad\Dgn\HAM153.038.40.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	36
CONST.	2015	PHSIP-3602(5)	40



1/15/2015 7:18:11 AM
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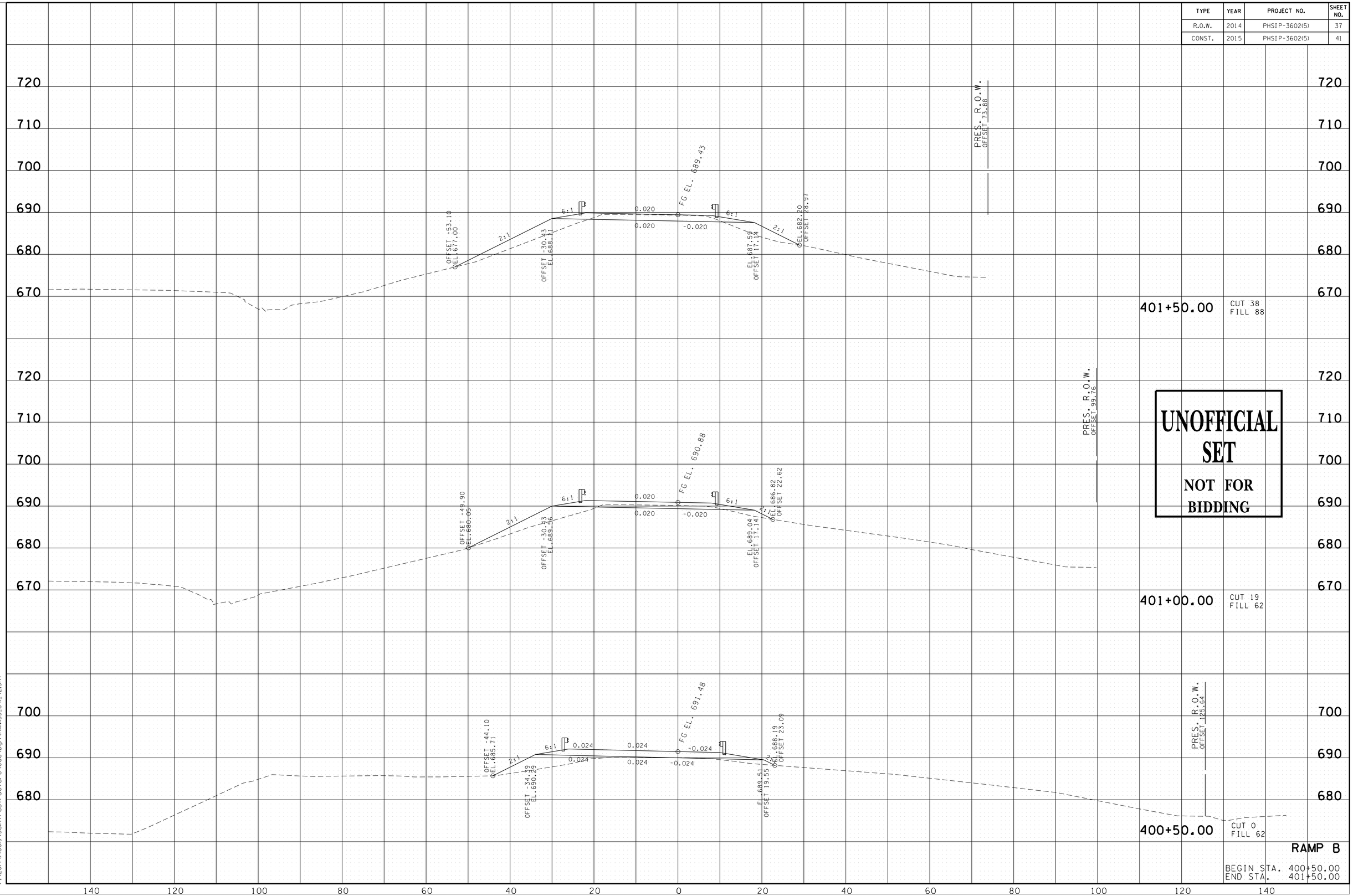
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	37
CONST.	2015	PHSIP-3602(5)	41



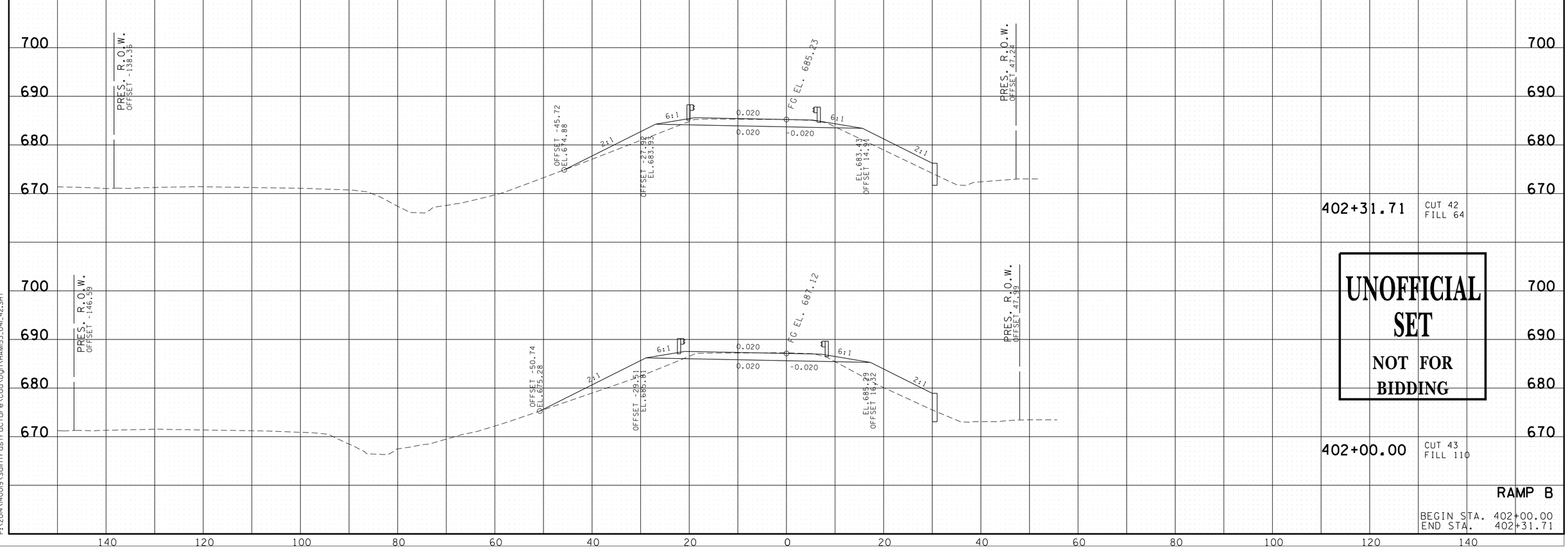
UNOFFICIAL SET
NOT FOR BIDDING

RAMP B

BEGIN STA. 400+50.00
END STA. 401+50.00

1/15/2015 7:19:21 AM
P:\2014\140019\Sainfrastructure\Cad\Dgn\HAM153_041_42.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	38
CONST.	2015	PHSIP-3602(5)	42



UNOFFICIAL SET

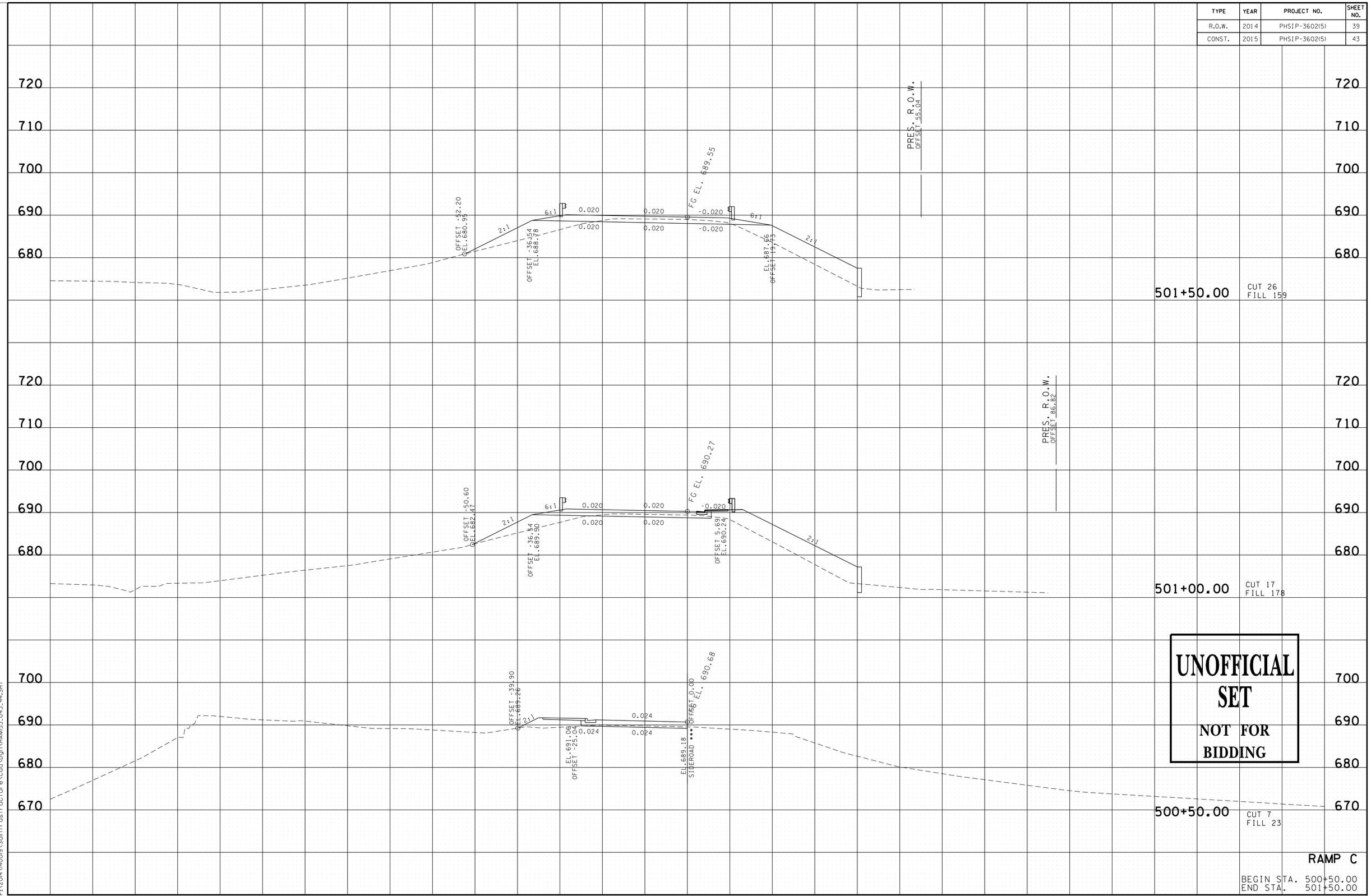
NOT FOR BIDDING

RAMP B

BEGIN STA. 402+00.00
END STA. 402+31.71

1/15/2015 7:58:26 AM
P:\2014\40019\Saintfrastructure\Cad\Dgn\HAM53_04L42.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	39
CONST.	2015	PHSIP-3602(5)	43



UNOFFICIAL SET

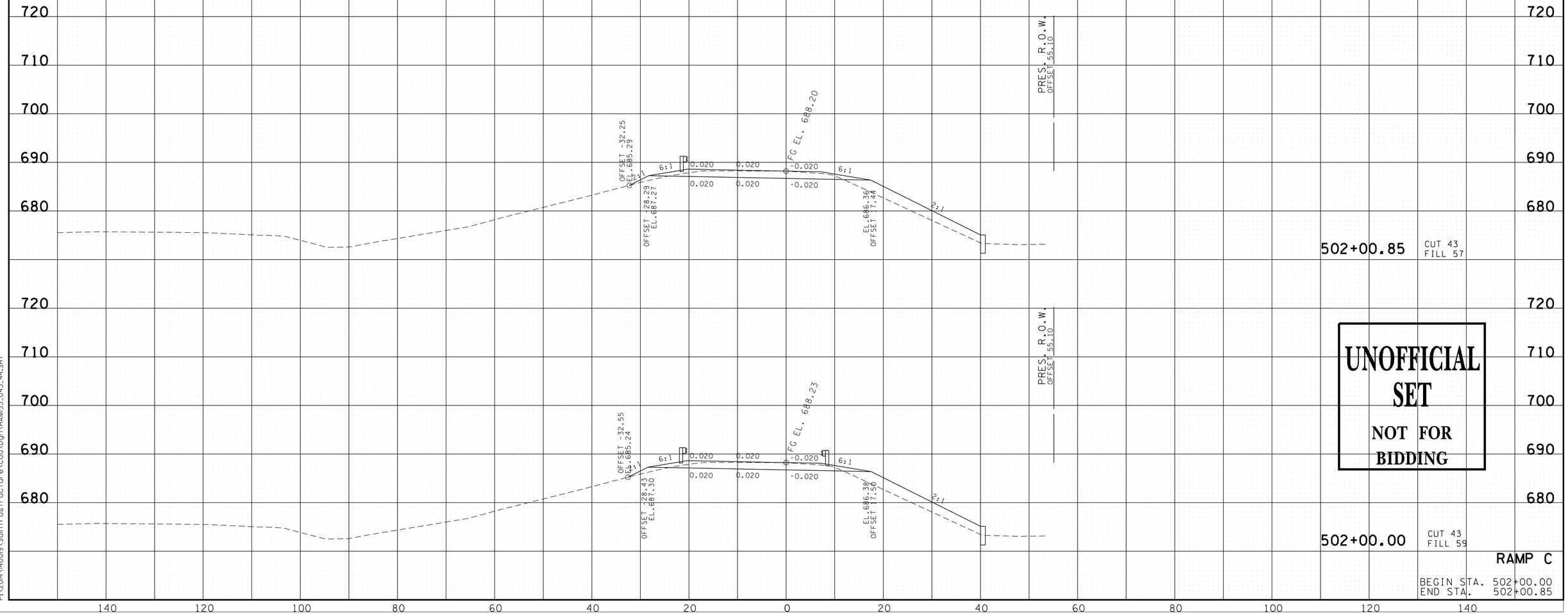
NOT FOR BIDDING

RAMP C

BEGIN STA. 500+50.00
END STA. 501+50.00

1/15/2015 8:07:59 AM
P:\2014\140019\Saintfrastructure\Cad\Dgn\HAM53_043_44.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	40
CONST.	2015	PHSIP-3602(5)	44



UNOFFICIAL SET

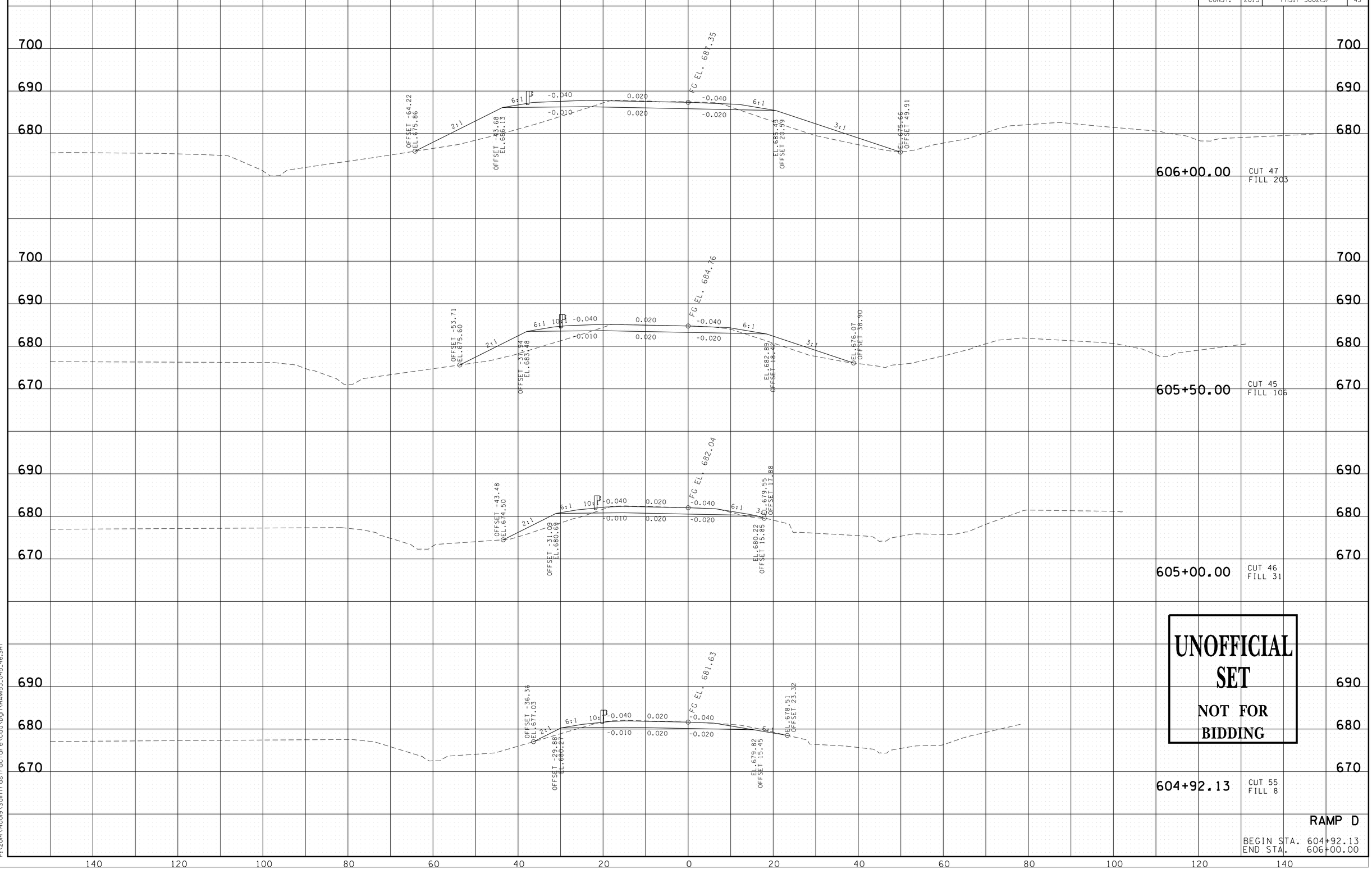
NOT FOR BIDDING

RAMP C

BEGIN STA. 502+00.00
END STA. 502+00.85

1/15/2015 8:08:33 AM
P:\2014\40019\Sainfrastructure\Cad\Dgn\HAM53_043_44.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	41
CONST.	2015	PHSIP-3602(5)	45



UNOFFICIAL SET

NOT FOR BIDDING

RAMP D

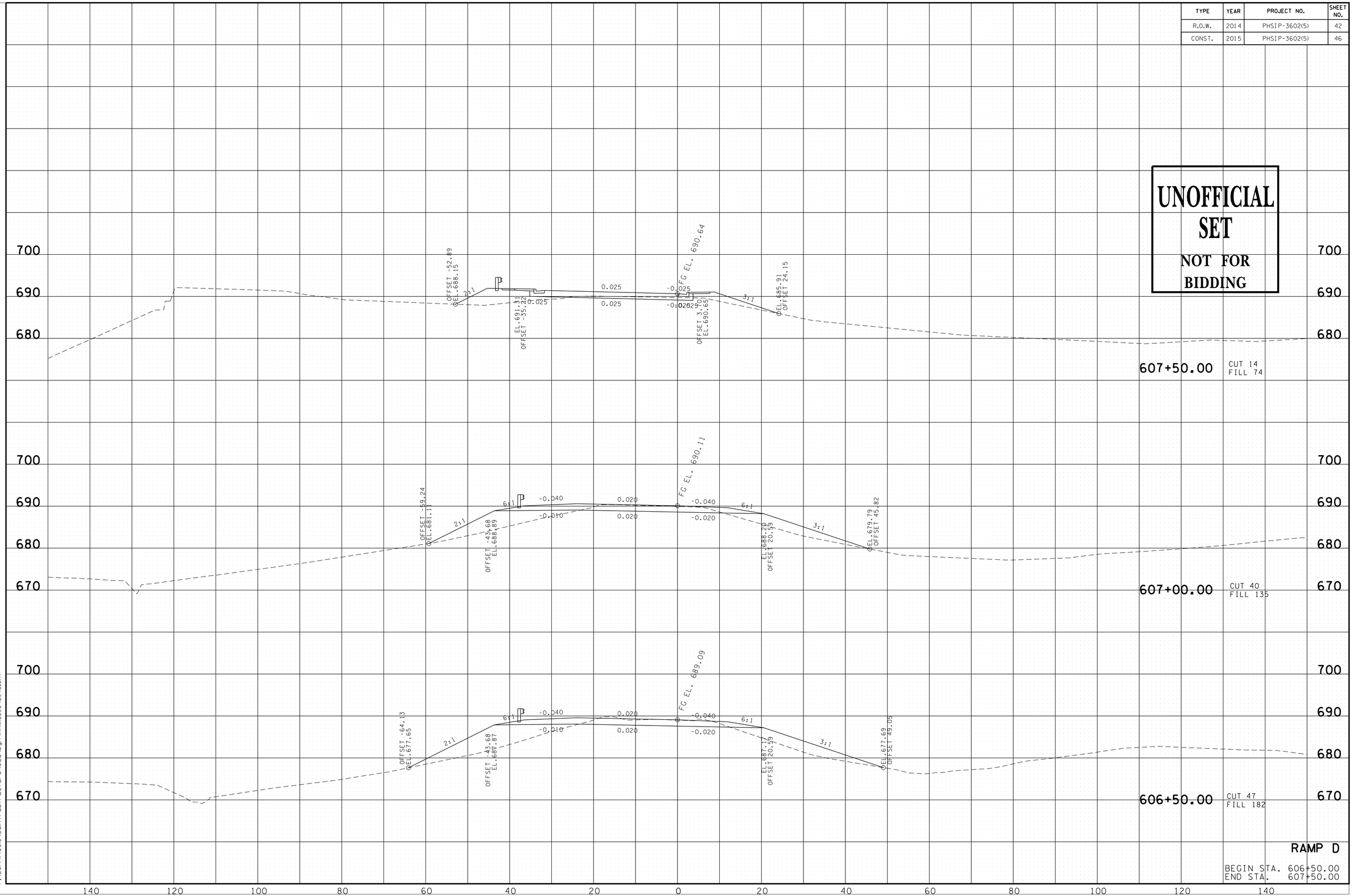
BEGIN STA. 604+92.13
END STA. 606+00.00

1/15/2015 8:10:09 AM
P:\2014\40019\Sainfrastructure\Cad\Dgn\HAM53_045_46.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	PHSIP-3602(5)	42
CONST.	2015	PHSIP-3602(5)	46

UNOFFICIAL SET

NOT FOR BIDDING



RAMP D

BEGIN STA. 606+50.00
END STA. 607+50.00

1/15/2015 8:09:38 AM
P:\2014\40019\Saintfrastructure\Cad\Dgn\HAM53_045_46.SHT